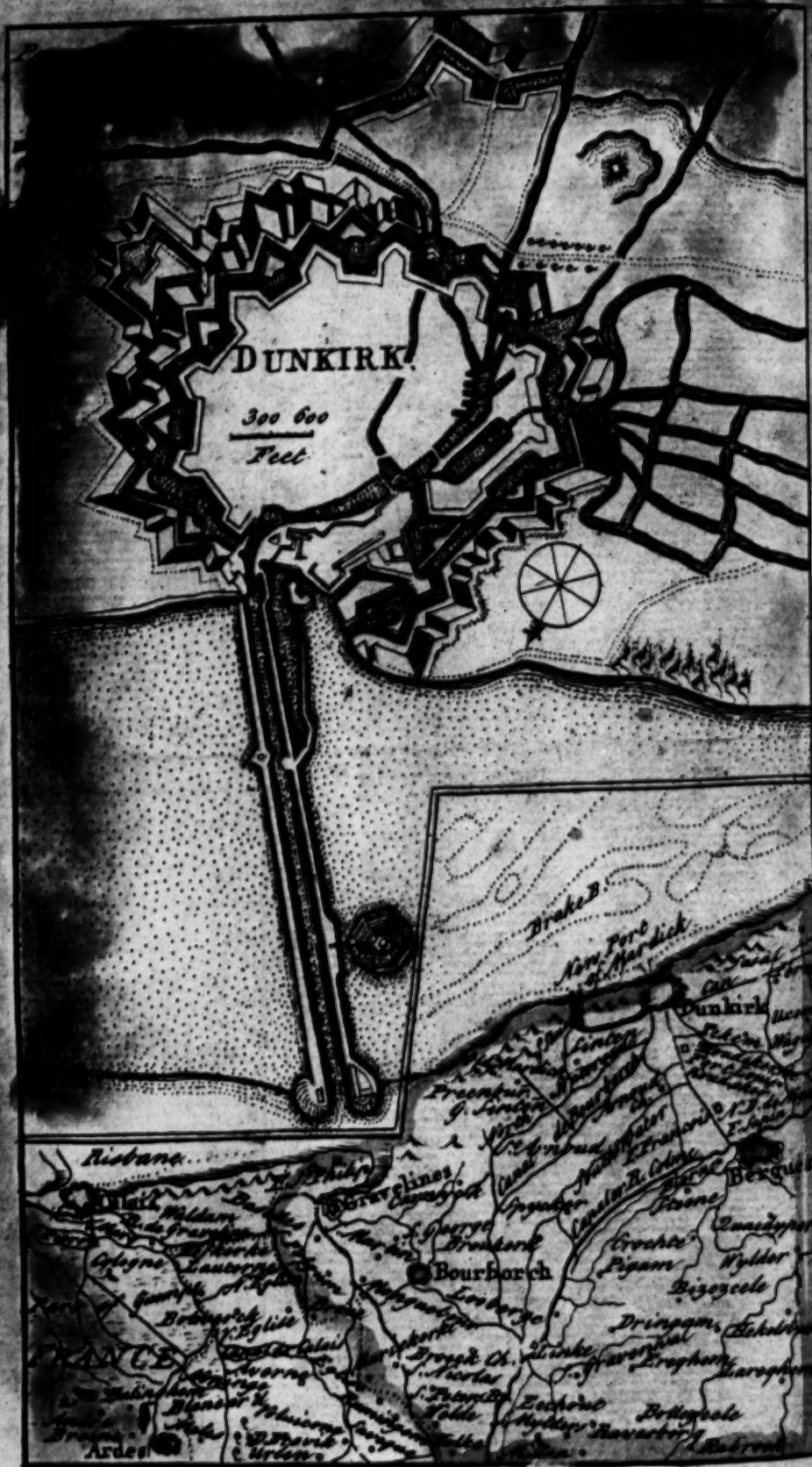
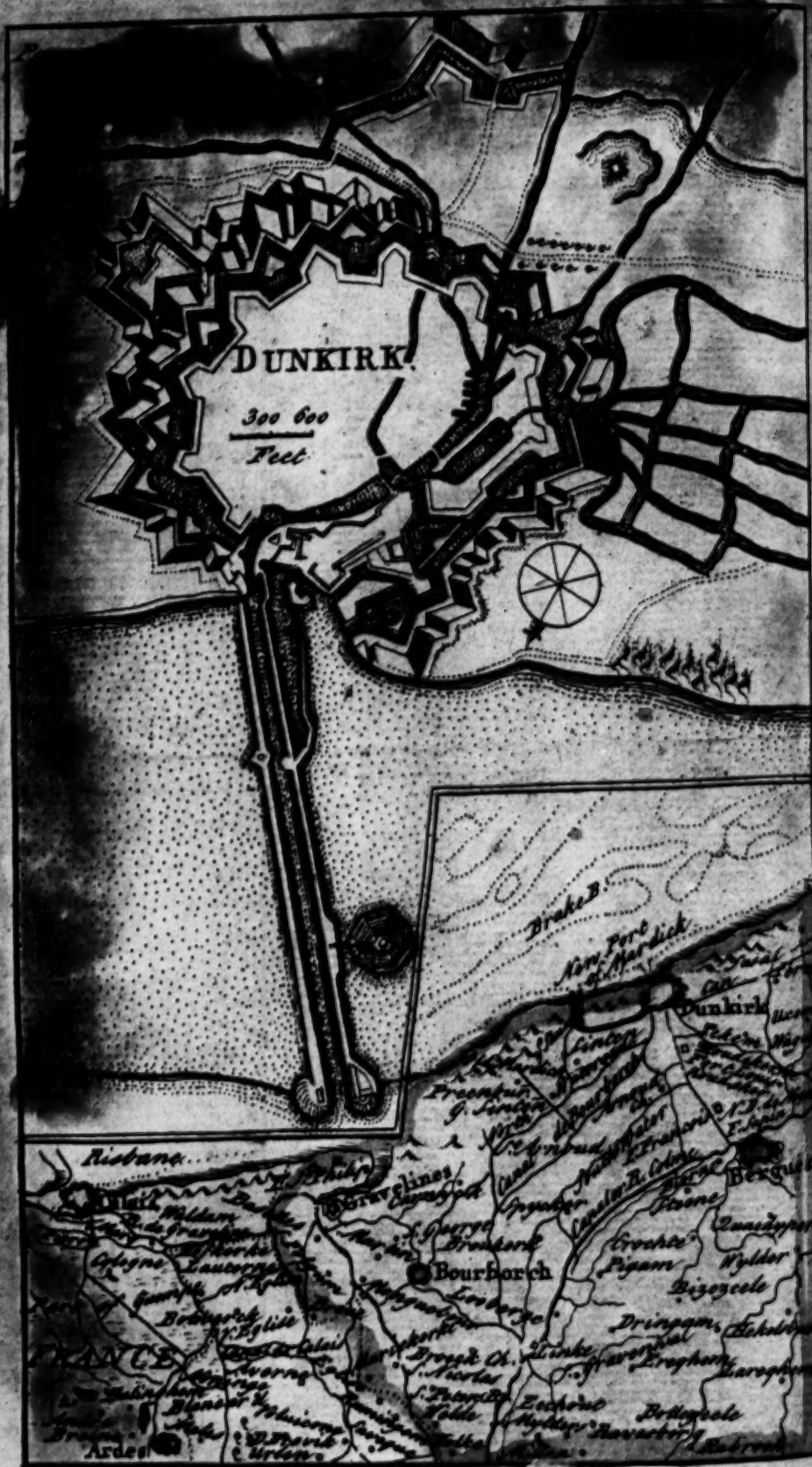






AN
INTRODUCTION
TO THE
Art of Fortification.

CONTAINING

Draughts of all the Common Works used
in MILITARY ARCHITECTURE, and of
the Machines and Utensils employed in
Attacks and Defences;

WITH

Brief REFERENCES for their Explanation,

ALSO, A

MILITARY DICTIONARY,
WHEREIN

The said Works and Machines are not only
more fully described, but all the other
Technical Terms and Phrases made use of
in the Science of WAR, are distinctly ex-
plained.

L O N D O N:

Printed for and Sold by JOHN BRINDLEY, Book-
seller to his Royal Highness the Prince of Wales,
at the *Feathers* in *New-Bond-Street*.

M DCC XLV.

AN
INTRODUCTION

TO THE
ART OF FORTIFICATION.

CONTAINING
A Description of all the Common Works used
in War, and the Principles and Rules
for their Construction.

WITH
NEW ENGRAVINGS OF THE MOST
REMARKABLE WORKS.

AND A
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in the Strand, near the Royal Exchange, the Strand,
at the Sign of the Gun, in the Strand.
MDCCLXXV.



A. THE FORM OF THE
OF
FORTIFICATION.

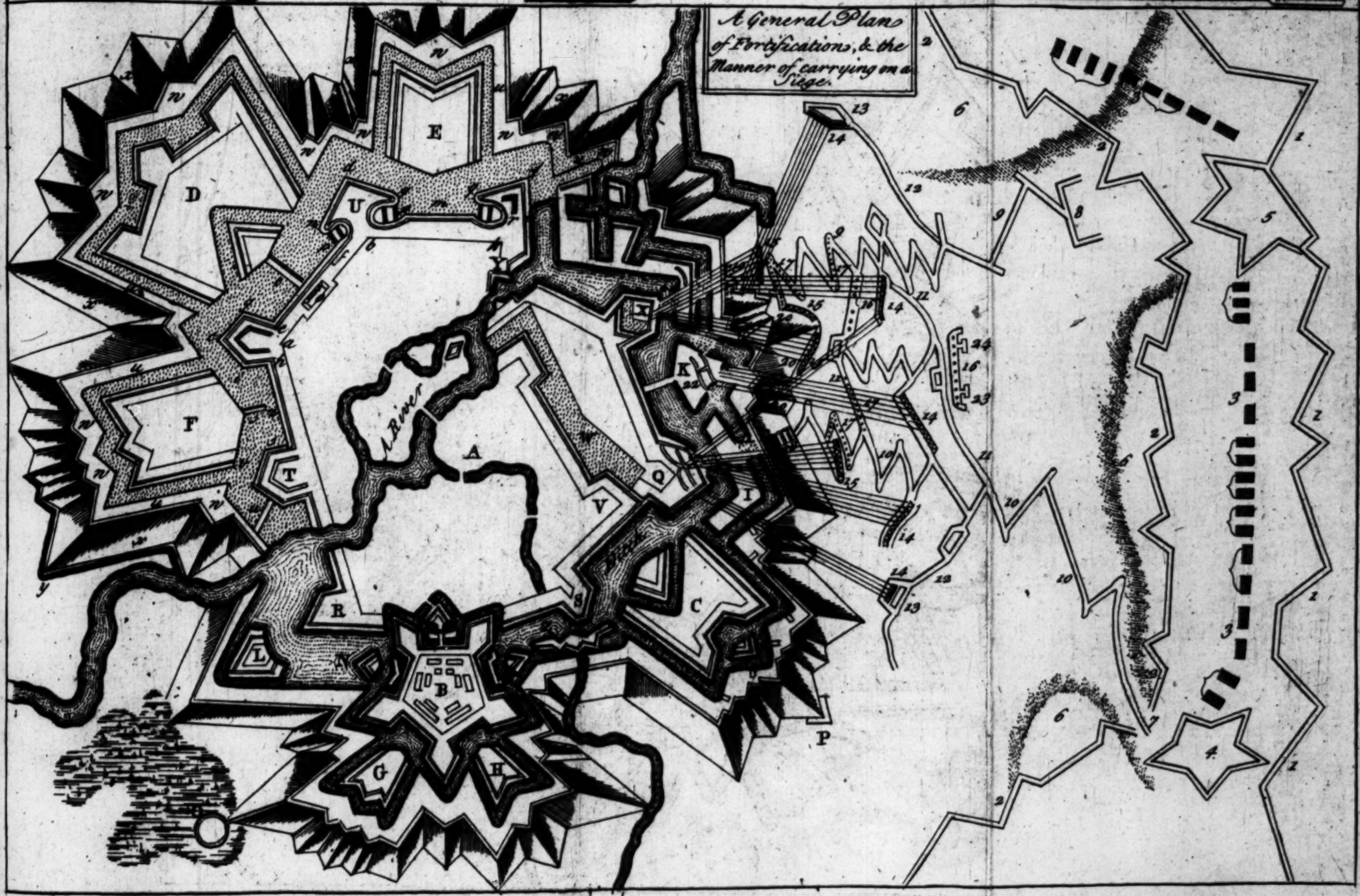
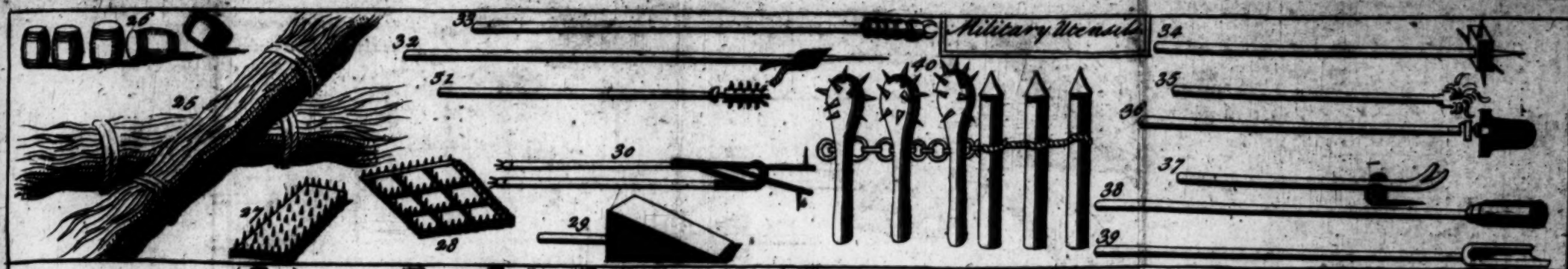
FORTIFICATION is defined the Art of applying the Doctrine of Plain Trigonometry to the Calculation of the Lines, Sides, and Angles of a Fort of any Figure, regular or irregular, in order to secure and defend the Place so fortified, against the Attacks of an Enemy. It is better taught by Representation than by Discourse, and therefore we have laid down all the Parts of it in the two Cuts hereto annexed; in the first upon a Plane, and in the second by an Orthographical Section, or Profile, which are explained according to the References, and more fully under the respective Articles in the subsequent Dictionary: To these therefore we recommend our Reader for whatever might be farther expected in this Place, by Way of Introductory Discourse: Particularly in the Words *Fortification* and *Maxim*.

REFERENCES

EXPLANATION of the References in the
Plates of FORTIFICATIONS and AT-
TACKS, and MILITARY UTENSILS.

- A. *THE Town, an Irregular Fortifi-
cation.*
- B. *The Citadel, a Regular Pentagon.*
- C. *A Horn Work.*
- D. *A Crown Work.*
- E. *A Single Tenaille.*
- F. *A Double Tenaille.*
- G. *A Priest's Bonnet.*
- H. *A Swallow's Tail.*
- I. *A Counter Guard.*
- K. *A Raveline.*
- L. *A Half Moon.*
- M. *Two Lunettes.*
- N. *N. Tenailles in the Foss.*
- O. *A Horse Shoe.*
- P. *A Bonnet.*
- Q. *A Regular Bastion.*
- R. *An Irregular Bastion.*
- S. *A Deform'd Bastion.*
- T. *A Flat Bastion.*
- U. *A Demi Bastion.*
- W. *A Retrenchment.*
- X. *A Retirade.*
- Y. *Redans, or Indented Works.*
- Z. *An Envelope, or Sillon.*
- a. b. *The Interior Poligone.*

c. d,



to the PLATES.

- c. d. *The Exterior Poligone.*
- e. f. *A Curtine.*
- e. g. *A Flank.*
- c. g. *A Face,*
- e. h. *The Gorge.*
- f. e. g. *Angle of the Curtine.*
- e. g. c. *Angle of the Shoulder.*
- g. c. i. *The Flanked Angle.*
- a. b. k. *Angle of the Poligone.*
- l. m. d. *Angle of the Tenaille.*
- c. z. *Line of Defence Razant.*
- c. fs. *Line of Defence Fichant.*
- fs. z. *The Second Flank.*
- r. c. *The Capital.*
- p. *Cazemates.*
- q. *Orillons.*
- n. *A Shoulder.*
- r. *A Cavalier.*
- o. *A Platform.*
- t. *A Coffre.*
- s. *A Capomere.*
- u. *A Traverse.*
- v. *The Covert Way, and Counterscarp.*
- w. *Places of Arms.*
- x. *The Glacis.*
- y. *The Advance Foss, Ditch or Moat.*
- 1. *Lines of Circumvallation.*
- 2. *Lines of Contravallation.*
- 3. *Part of the Camp.*
- 4. *Park of Artillery.*
- 5. *The Head Quarters.*
- 6. *Rising*

REFERENCES

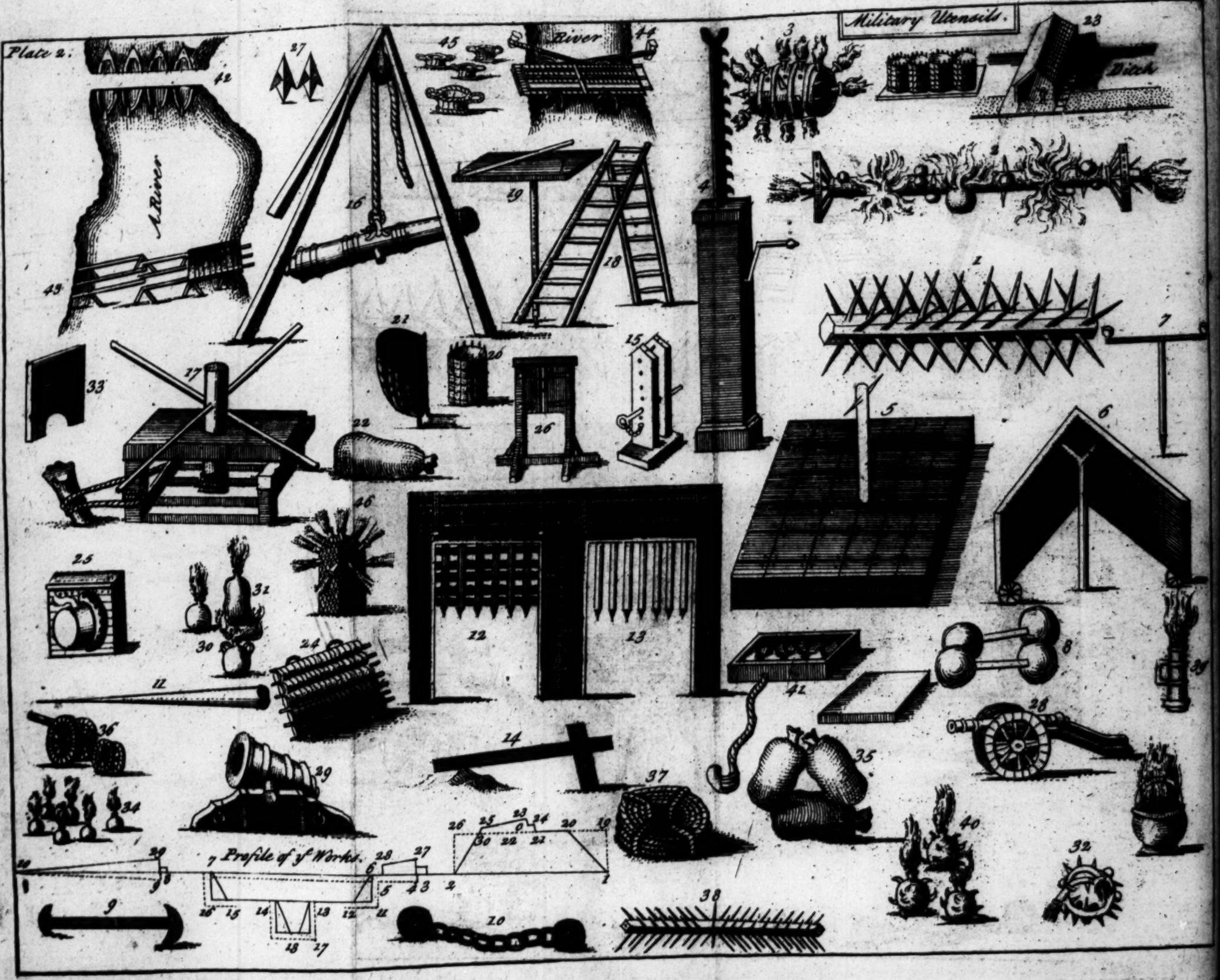
6. *Rising Grounds.*
7. *Opening of the Trenches, by the Advantage of the Rising Grounds.*
8. *Epaulement.*
9. *Attack on the Right.*
10. *Attack on the Left.*
11. *Parallels, Lines of Communication, or Boyau's.*
12. *Likewise Boyau's.*
13. *Places of Arms.*
14. *Batteries for dismounting the Enemy's Guns.*
15. *Breach Batteries.*
16. *Mortar Batteries.*
17. *Coeborn Mortars.*
18. *A Sapp.*
19. *A Lodgment.*
20. *Mines.*
21. *Traversee to pass the Foss.*
22. *Lodgments on the Works.*
23. *A Powder Chamber.*
24. *A Bomb Chamber.*

MILITARY UTENSILS.

25. *Facines, or Faggots.*
26. *Earth Barrels filled.*
27. *A Herse,*
28. *A Herfillon,*
29. *A Wedge for pointing the Cannon.*

Plate 2.

Military Utensils.



2. To the PLATE S.

30. *Pincers, for putting red-hot Ball into the Cannon.*
31. *A Hairy Drag.*
32. *A Linstock, to fire the Cannon.*
33. *A Worm, to draw the Shot.*
34. *A Gunner's Hammer.*
35. *A Drag for cleaning the Cannon.*
36. *A Shovel to stir the Powder with.*
37. *An Iron Crow.*
38. *A Cannon Rammer.*
39. *Instrument to put in the Powder.*
40. *Chain'd Stakes to stop up Passes.*

MILITARY UTENSILS, Plate II.

1. *A Cheval de Frize mounted.*
2. *A Cheval filled with Fireworks.*
3. *A Barrel with Fireworks.*
4. *Engine for lifting heavy Baggage, &c.*
5. *Floating Bridge, to cross a wet Ditch.*
6. *Madrier for carrying on Approaches.*
7. *An Engineer's Level.*
8. *Cross-Bar Bullets.*
9. *Cross-Bar Half-Balls.*
10. *Chain'd Balls.*
11. *A Miner's Instruments, to make Holes in Rocks, &c.*
12. *Gate with Orgues.*
13. *Gate with a Herse, or Portcullis.*
- 14.

REFERENCES

14. *A little Crab, to raise Cannon, &c.*
15. *A Chiorette, or Crab.*
16. *Another Crab, to fix Cannon on their Carriages.*
17. *A Capstane, or Crane.*
18. *A Scaling Ladder.*
19. *Board for taking of Flats.*
20. *A Gabion.*
21. *A Dosser.*
22. *A Bag of Earth.*
23. *Gallery, with a Covering of Gabions.*
24. *Clayes, or Hurdles.*
25. *A Petrard, with its Madrier.*
26. *A Chandelier.*
27. *Caltrops, or Crows Feet.*
28. *A Cannon on its Stocks.*
29. *A Mortar on its Stocks.*
30. *Bombs.*
31. *A Hollow Bullet.*
32. *A Crown Firework, or Crown with a Fire-pot.*
33. *An Aim Frontlet.*
34. *Grenades.*
35. *Sacks of Earth for the Besieged.*
36. *A Cannon on its Stock and Carriage.*
37. *Cables to stop Flying Bridges, or Boats, &c.*
38. *Herissons.*
39. *Piece to shoot at Rejoicings.*
40. *Carcasses.*
41. *A Caisson, with its Lid and Saucidge.*

to the PLATES.

- 42. *A Bridge of Boats.*
- 43. *Flying Bridge of Communication.*
- 44. *Floating Bridge upon Casks.*
- 45. *Corbeilles, or little Baskets.*
- 46. *Fire-pot full of Fireworks.*

An Orthographical Section of all the common Works, for the better understanding of the Plan.

- 1, 10. *Level of the Plan.*
- 1, 2. *Base of the Rampart.*
- 2, 5. *The Fausse Braye.*
- 2, 4. *Space of the Fausse Braye.*
- 4, 5. *Base of the Parapet of the Fausse Braye.*
- 5, 6. *The Berme, or Foreland.*
- 6, 7. *Breadth of the Ditch.*
- 7, 9. *The Covert-Way.*
- 29, 10. *The Glacis.*
- 3, 4. *Breadth of the Banquet of the Fausse Braye.*
- 8, 9. *Breadth of the Banquet of the Covert Way.*
- 1, 19, 2, 26. *Height of the Rampart.*
- 19, 20. *Inward Talus of the Rampart.*
- 26, 30. *Outward Talus of the Rampart.*
- 22, 30. *Base of the Parapet.*
- 22, 23. *Height of the Parapet.*
- 22, 25. *Glacis of the Parapet.*

REFERENCES, &c.

- 22, 0. *Height of the Banquet.*
24, 0. *Height above the Banquet.*
4, 27. *Height of the Banquet of the Fausse
Braye.*
27, 28. *Glacis of the Fausse Braye.*
6, 11. 7, 16. *Depth of the Ditch.*
11, 12. 15, 16. *Talus of the Ditch.*
6, 12. *The Escarpe.*
7, 15. *The Counterscarpe.*
13, 14. *Breadth of the Curvette.*
17, 18. *Talus of the Curvette.*
9, 29. *Depth of the Covert Way.*
20, 21. *The Terre Plain, or the Level of
the Rampart.*





Military Dictionary.

A D

ADJUTANT, the same as *Aid Major*, which Word consult. The former Name is most used in *England*, the latter abroad.

Advanc'd Fosse. A Moat round the *Glacis*, or Esplanade of a Place, to prevent a Surprise. See *Avant Fosse*.

Advanc'd Guard. See *Guard*.

Aid de Camp. An Officer always following one of the Generals; that is, the Field Marshal, General in Chief, Lieutenant General, or Major General, to receive and carry their Orders, as Occasion requires. When the King is in the Field, he ap-

A I

points young Gentlemen of Note to carry his Orders, and they are called the King's *Aids de Camp*. A Lieutenant General has two *Aids de Camp*, and a Major General one.

Aid Major, or *Adjutant*. An Officer who eases the Major of Part of the Burthen of his Duty, and performs it all in his Absence. He receives Orders from the Major, and delivers them to the Serjeants in a Ring; appoints Detachments for Convoys, places the Guards, distributes Ammunition, &c. Some Majors have several *Aids Majors*. Each Troop of Guards has but one
b 2 Major,

Major, who has two *Aids Majors*. Every fortified Place has but one Major, who has more or fewer *Aids Majors* under him, according to its Bigness. Every Regiment of Foot has as many *Aids Majors* as it contains Battalions. When a Battalion is drawn up, the *Aid Major's* Post is on the Left, beyond all the Captains, and behind the Lieutenant Colonel.

Aim Frontlet. An Engineer's Machine, whereby he levels and directs his Cannon.

Alarm, sometimes falsely writ *Alarum*, is a sudden Apprehension upon some Report, which makes Men run to their Arms to stand upon their Guard. False Alarms are when they are taken upon false Reports, occasioned by a fearful or negligent Centinel; or they are given by the Enemy, only to keep their Adversaries from Rest, or otherwise to deceive them; or sometimes by a vigilant Officer, to try if the Guards are strict upon Duty.

Alarm Post. The Ground appointed by the Quarter Master General for each Regiment to march to, in Case of an Alarm.

Ambuscade, or Ambush. A Body of Men that lie concealed in a Wood, or other convenient Place, to surprize or enclose an Enemy. *To fall into an Ambush; To discover an Ambush; To defeat an Ambush;* are Phrases used on Account of these Parties.

Ambligon. An Angle of more than 90 Degrees, or obtuse Angle.

Ammunition. Implies all Sorts of Warlike Stores, but more particularly Powder and Ball.

Ammunition Bread. The Bread that is provided for, and distributed to the Soldiers. The usual Allowance is a Loaf of six Pounds to every Soldier, once in four Days.

Angle. As a Geometrical Term in general, signifies the meeting of two Lines, and touching one another in the same Plain; yet not lying in the same strait Direction, but so, that if prolong'd, they would cut one another, and so form another Angle upon the Back of the first.

A Right Angle is form'd by a Line falling perpendicularly upon another, and the Measure of this Angle is always 90 Degrees.

An Acute Angle. That which is sharp, and less open than the right Angle, in Measure under 90 Degrees.

An Obtuse Angle. That which is blunt, and more open than a right Angle; the same as *Ambligon*.

An Angle Rectilinear is made by strait Lines, to distinguish it from the Spherical, or Curvilinear.

Angle at the Center. In Fortification, is that which is formed in the Midst of the Polygon, or Figure, by two Lines proceeding

ceding from the Center, and terminating at the two nearest Angles of the Polygon.

Angle of the Curtin, or Angle of the Flank. That which is made by, and contain'd between the Curtin and the Flank.

Angle of the Polygon. That which is made by the Meeting of the two Sides of the Polygon, or Figure, in the Center of the Bastion.

Angle of the Triangle. Half the Angle of the Polygon.

Angle of the Bastion, or Flank'd Angle. That which is made by the two Faces, being the utmost Part of the Bastion, most exposed to the Enemies Batteries, and called the Point of the Bastion.

Angle diminish'd. Only used by the Dutch Engineers, and composed by the Face of the Bastion, and the exterior Side of the Polygon.

Angle of the Shoulder, or Epau-le. Form'd by one Face and one Flank of the Bastion.

Angle of the Flank. Vide *Angle of the Curtin.*

Angle of the Tenaile, or outward Flanking Angle, call'd also *Angle-mort, or Dead Angle, Angle Rentrant, or Angle Inwards.* Made by two Lines *Fichant*, that is, the Faces of the two Bastions extended 'till they meet in an Angle towards the Curtin, and is that which always carries its Point towards the Work.

Angle forming the Face, is the inward Angle, composed of one Face.

Angle forming the Flank. Made by the Flank, and that Part of the Side of the Polygon, which runs from the said Flank to the Angle of the Polygon, and if protracted crosses the Bastion.

Angle of the Moat, is formed before the Center of the Curtin, by the outward Line of the Moat or Fosse.

Flank'd Angle, or Point of the Bastion. See *Angle of the Bastion.*

Angle Saillant, Sortant, or Sallying Angle. That which thrusts out its Point from the Work towards the Country. Such is the Angle of the Counterscarp before the Point of a Bastion.

Angle Rentrant, or Entering Angle. An Angle pointing inwards, as the *Saillant* does outwards. Such is the Angle of the Counterscarp before the Curtin.

Inward Flanking Angle. That which is made by the Flanking Line, and the Curtin.

Angle of the Counterscarp. Made by two Sides of the Counterscarp before the Middle of the Curtin.

Angles of a Battalion. Made by the last Men at the Ends of the Ranks and Files.

Front Angles. The two last Men of the Front-Rank.

Rear Angles. The two last Men of the Rear Rank.

Anspesade. See *Lanspesade.*

Antefature. A small Retrenchment, hastily made with Palisades.

A P

Palisadoes, Gabions, or Bags of Earth, wherewith Men cover themselves suddenly, to dispute the rest of the Ground, when the Enemy has gained Part.

Appointé. A Foot Soldier, who, for his long Service and extraordinary Bravery, receives Pay above the private Centinels, and expects to be advanced. This is in *France* only, we having no such in *England*.

Approaches. All the Works that are carried on towards a Place that is besieged; as the Trenches, Epaulments without Trenches, Redoubts, Places of Arms, Sappe, Galleries, and Lodgments. See these Words in their several Places. Approaches also signify Attacks.

Arrière, Ramen, Branch, Return, or Gallery of a Mine. See Gallery.

Arca. The superficial Content of any Rampart, or other Work.

Army. A numerous Body of Troops, consisting of Horse, Foot, and Dragoons, commanded by a General, and divided into Brigades. See Wings, Center.

Flying Army, or Flying Camp. See Camp.

Arms, Place of. See Place.

Arsenal, or Magazine. A Place appointed for making and keeping of all Kind of Warlike Stores.

Artillery. All Sorts of great Guns, Mortars, Petards, and the like. The Train of Artil-

A T

lery includes all Sorts of Warlike Stores. There is a Comptroller, and very many other Officers belonging to the Artillery; besides Conductors, Bombardiers, Gunners, Matrosses, Pioneers, Pontoon-men, Carpenters, Wheelwrights, Smiths, Coopers, Tinmen, and Collarmakers. See Cannon.

Artillery Park. See Park.

Affault, or Storm. The Effort Men make, and the Fight they engage in, to become Masters of a Post, and gain it by main Force, driving the Defendants from it, and exposing their Bodies, for this Purpose, to the Fire of the Besieged, without the Defence of any Works. An Assault is generally made by the Regiments that guard the Trenches, sustained by Detachments from the Army. Whilst it lasts, and both Parties are mixed, there is no Danger of the Cannon on either Side, because both are afraid of destroying their own Men among the Enemies. The Phrases the Word is used in are; *To give an Assault: To be commanded to the Assault: To stand to an Assault: To second the Assault: To repulse an Assault: To carry by Assault.*

To Assault, or Storm. Vide *To Insult.*

Assembly. The second Beat of Drum before a March, at which they strike and roll up their Tents, and stand to their Arms.

Attack. The General Assault,

or

A T

or Onset, that is given to gain a Post, or upon any Body of Troops.

Attack of a Siege. The Works the Besiegers carry on, either Trenches, Galleries, Sappes, or Breaches, to reduce a Place, on any of its Sides. Most commonly two Attacks are carried on against one same *Tenaille*, or Front of a Place, with Lines of Communication between them. *Vide Trenches.*

Falſe Attacks are not carried on with such Vigour as true, not being intended to do the same Effect, but only to give a Diversion to the Besieged, divide the Garrison, and favour

A B A

the real Attack; and yet sometimes the false Attack has proved as successful as the real.

Regular, or Droit Attacks. Those which are carried on in Form, according to Rules of Art.

Avant Fosse, or Ditch of the Counterscarp, next the Campaign, at the Foot of the Glacis. Engineers do not approve of it, where there is a Possibility of draining it, because then it is a Trench ready made for the Besiegers, to defend themselves against the Sallies of the Besieged; and besides, it obstructs the throwing of Succours into the Place.

B.

BACULE. A Gate made like a Pitfall, with a Counterpoise before the Advanced Guards, near the Gate, which is supported with Stakes.

Baggage Waggon. Those in which the Officers and Regiments Baggage is carried. Before a March they are appointed a Rendezvous, and are marshall'd by the Waggon-master General, according to the Rank the Regiments have in an Army. On a March they sometimes follow their respective Columns of the Army, sometimes the Artillery, and sometimes make a Column of themselves. The General's Baggage is first. If the Army march from the Right, the Bag-

gage of that Wing has the Van; if from the Left, the Baggage of the Left has the Van. Each Waggon has a Flag, to shew to what Regiment it belongs.

Bags. *Vide Canvas Bags.*

Bayonet. See *Bayonet.*

Ball. *Vide Bullet and Fire Ball.*

Ban. A Proclamation made at the Head of a Body of Troops, or in the several Quarters of the Army, by Sound of Trumpet, or Beat of Drum, either for observing of Martial Discipline, or for declaring a new Officer, or punishing a Soldier, or the like.

Baneliers. Little Wooden Cases covered with Leather, of which every Musketeer used to wear

B A

Belt, or **Collar**: Each of them contained the Charge of Powder for a Musket. But they are not used now, the Foot Soldier wearing a Leathern Pouch to a Broad Belt.

Bands. Bodies of Foot properly, as the French formerly called all their Infantry, *Bands Françaises*. In England the Word is still used, the Militia being called the Trained Bands: As also for the Band of Pensioners, a Company of Gentlemen attending the King's Person upon solemn Occasions.

Banquette. Vide *Footbank*.

Barrack. A Hut, like a little Cottage, for Soldiers to lie in the Camp. Once only those of the Horse were called Barracks, and those of the Foot Huts; but now the Name is indifferently given to both. These are made, either when the Soldiers have not Tents, or when an Army lies long in a Place in bad Weather; because they keep out Cold, Heat, or Rain, better than Tents, and are otherwise more commodious. They are generally made by fixing four forked Poles in the Ground, laying four others across them, and building the Walls with Wattles, Sods, or such as the Place affords. The Top is either thatch'd, or cover'd with Planks, or sometimes with Turf.

Barbe. To fire *en Barbe*, is to fire the Cannon over the Parapet, instead of putting it

through *Embrasures*. To fire thus, the Parapet must be but three Foot and a half high.

Barm, or **Berm**. Vide *Fore-land*.

Barricade. A Fence made of Pallisadoes.

Barrels, filled with Earth, serve to make Parapets to cover the Men, like the Gabions, and Canvas Bags.

Thundering Barrels are filled with Bombs, Grenades, and other Fireworks, to be rolled down a Breach.

Base, or **Basis**. The Level Line on which any Work stands, that is even with the Ground, or other Work on which it is erected. Thus the Base of a Parapet is the Rampart.

A Base signifies also the smallest Piece of Cannon, carrying a Ball but of five Ounces.

Base-ring of a Cannon. The great Ring next to and behind the Touch-hole.

Baskets, or **Corbeilles**, are used to fill with Earth, and placed one by another upon a Parapet, to cover the Men from the Enemy's Shot. They are wider at the Top than at the Bottom, that there may be Space between them below for the Men to fire thro' upon the Enemy. They are generally a Foot and a half high, as much broad at Top, and eight or ten Inches at Bottom.

Base Breuité, or **Base Enclosure**. The same as *Faust Brege*.

Bastion.

Bastion. A great Work of Earth, sometimes fac'd or lin'd with Stone, or Brick, and sometimes with Sods, generally advancing before an Angle of the *Polygon* towards the Campaign. The Lines terminating it are two Faces, two Flanks, and two *Demigorges*. The Union of the two Faces makes the outmost Angle, call'd *The Angle of the Bastion*. The Union of the two Faces to the two Flanks, makes the Side Angles, called the *Shoulders* or *Epaules*; and the Union of the two other Ends of the Flanks to the two Curtins, forms the Angles of the Flanks.

A Bastion Compos'd, is when the two Sides of the interior *Polygon* are very unequal, which makes the *Gorges* also unequal.

A Bastion cut off with a Tenaille, in French, *Bastion coupé*, or *Bastion à Tenaille*, is that whose Point is cut off, and makes an Angle inwards, and two Points outwards, that is a *Tenaille*. This is done when Water, or any other Accident, hinders carrying on the Bastion to its full Extent.

A Bastion deform'd. That which wants one of the *Demigorges*, because one Side of the interior *Polygon* is so very short.

A Demi Bastion. Has but one Face and Flank, and is usually before a Horn-work, or Crown-work. It is also call'd an *Epaulement*.

A Bastion detach'd, or cut off. That which is separated from the Body of the Work. It differs from a Half Moon, whose Rampart and Parapet are not so

high and thick as the Body of the Place.

A Double Bastion, is rais'd on the Plain of the great Bastion, and has another Bastion built higher, leaving 12 or 18 Feet between the Parapet of the lower, and the Foot of the higher. It is sometimes in the Nature of a Cavalier.

A Hollow, or Voided Bastion, in French, *Bastion Vuide*, or *Creux*, has only a Rampart and Parapet about its Flanks and Faces, leaving an empty Space towards the Center, and the Earth so low, that when an Enemy is once lodg'd on the Rampart, there is no making a Retrenchment towards the Centre, but what will be under the Fire of the Besiegers.

A Plat or Flat Bastion. If the Distance between the Angles of the interior *Polygon* be double the usual Length, then a Bastion is made in the middle before the Curtin or strait Line; whereas the others are generally before the Angles: And this is call'd a *Plat Bastion*. It has generally this Disadvantage attending it, That unless there be an extraordinary Breadth allow'd to the Moat, the returning Angle of the Counterscarp runs back too far into the Ditch, and hinders the Sight and Defence of the two opposite Flanks.

A Regular Bastion, is that which has a due Proportion of Faces, Flanks, and *Gorges*.

An Irregular Bastion, is that wherein that Equality of Proportion is omitted.

B A

A Solid Bastion, rises equally to the Ramparts of the Place, without any empty Space towards the Centre. They have this Advantage above others, that they afford Earth enough to make a Retrenchment, in case the Enemy lodge himself on the Top of the Bastion, and the Besieged are resolved to dispute every Foot of Ground.

Battalion. A Body of Foot, commonly consisting of 700 or 800 Men, two Thirds whereof used to be Musketeers, and the other Third Pikemen, who were posted in the Centre. But the general Use of Bayonets has brought that of Pikes into Disuse. *Battalions* are for the most Part drawn up six deep, that is, six Men in File, or one before another; those in length, or side by side, being call'd *Ranks*. Some Regiments consist of but one Battalion; but if more numerous, they are divided into several Battalions, according to their Strength; so that every one may be about the Number aforesaid. Thus the Battalions of *French Guards* have commonly but five Companies, because each of those Companies have 150 Men; but of other *French Regiments* there go 16 Companies to make up a Battalion, because they are but 50 Men in a Company. Of the *Swiss Guards* four Companies make a Battalion, because they are 180 in a Company. In the *English Foot-Guards*, the First Regiment consists of three Battalions, and the Second and Third of two each.

B A

When there are Companies of several Regiments in a Garrison, and they are to form a Battalion, those of the eldest Regiment post themselves on the Right; those of the second on the Left; and so the others successively on the Right and Left, till the youngest fall into the Centre. The subaltern Officers take their Posts before their Companies, the Captains on the Right and Left, according to their Degree. Battalions are divided into three great Divisions, which are the Right and Left Wings, and the Centre. The Grenadiers, of whom there are now usually one Company in a Battalion, take the Right of the other Companies. In marching, when there is not room for so large a Front, they break into Subdivisions, according as the Ground will allow. The Art of drawing up Battalions, teaches how to range a Body of Foot, in such Order and Form, that it may most advantageously engage a greater Body, either of Horse or Foot, or both: But the main Design is, to prevent the Foot being broken by the Horse when attack'd in open Field, where there are no Ditches, Hedges, or other Advantages to secure them. Formerly they used to reduce the Battalion to an *Obagon*, or Figure of eight Sides; and since the Hollow Square has been us'd: But both these Methods require too much Time upon sudden Occasions, and Men must be very well disciplin'd, or it will put them into greater Con-

B A

Confusion. There is usually great Uncertainty in computing the Number of an Army from that of the Battalions, which, by the common Chance of War, are often liable to be very incomplete.

Battery, or Platform. A Place to plant Guns on. It is laid with Planks and Sleepers for them to rest on, that the Wheels of the Carriages may not sink into the Earth. They are allow'd a little Stoop, or Inclining towards the Parapet, that the Guns may recoil the less, and be more easily brought back to their Place. *Field or Camp Batteries* are to have a Ditch before them, to be pallisado'd, and have a Parapet on them, and two Redoubts on the Flanks, or Places of Arms, to cover the Troops that are to defend them. The open Spaces in the Parapet, to put the Muzzles of the Guns out at, are called *Embrazures*, and the Distances between the Embrazures, *Merlons*. The Guns are generally about 12 Feet distant from one another, that the Parapet may be strong, and the Gunners have room to work.

Battery of Mortars, Differs from that of Guns, being sunk into the Ground, and without Embrazures: The *Dutch* call it a Kettle.

Battery Sunk, or Bury'd. In *French*, *Batterie Enterri*, or *Ruinante*. When the Platform is sunk into the Ground, so that there must be Trenches cut in the Earth against the Muzzles of the Guns for them to fire out at,

B A

or to serve as Embrazures. This Sort of Battery is generally us'd upon first making the Approaches, to beat down the Parapet of the Place.

Cross Batteries. Two Batteries which play athwart one another, upon the same Body, forming an Angle there, and beating with more Violence, whence follows greater Destruction; because what one Bullet shakes, the other beats down.

Battery de Enfilade; That which scours, or sweeps the whole Length of a strait Line, or the Face or Flank of any Work.

Battery en Echarpe; That which plays on any Work obliquely.

Battery de Revers, or *Murdering Battery*; That which plays upon the Enemy's Back.

Joint or Comerade-Battery; in *French*, *Batterie par Camarade*. When several Guns fire at the same time upon one Body.

'To raise a Battery', 'To plant a Battery', 'To ruin a Battery', are the Phrases that respect this Work. The latter signifies to blow it up, or nail the Guns. In a Siege, Guns are brought to the Battery in the Night, by Men, having Harness for that Purpose.

Batterie de Tambour. The *French* so call the Beat of Drum, which we call the General. *Vide General*, To beat the General.

Batteurs d'Estrade. Scouts or Discoverers, Horsemen sent out before,

B A

before, and on the Wings of an Army, a Mile, two or three, to discover, and give the General Account of what they see.

Battery-Master. His Province is to raise the Batteries : The Office is now suppressed in *England*, but not in *Holland*.

Battle. The regular Engagement of two Armies.

Battle-Array. The Order or Line of Battle ; the Form of drawing up the Army for Fight.

Main Battle. In *French*, *Corps de Bataille*. The main Body of the Army, which is the second of the three Lines, whereof the first is the Van, and the third is the Rear, or Reserve. *Vide* Line.

Bayonet. A broad Dagger without any Guard, generally made with a round hollow Handle, and a Shoulder, to fix to the Muzzle of a Musket, in which Manner it serves instead of a Pike, to receive the Charge of Horse, all the Men having first the Advantage of their Shot, and then, as many as there is Occasion for, with their Bayonets thus on their Muskets, cover the rest of the Musketeers. Frequently the whole Body fire with their Bayonets fix'd, which they do clear of them by means of the Shoulder abovemention'd, that they may be ready to use them instantly.

To beat a Parley. *Vide* *Chamade*. For this, and all other Beats, see also *Drum*.

Beetles. Great Sledges, or Hammers, to drive down Palisadoes, or for other Uses.

B L

Berme. *Vide* *Foreland*.

Biovac. A Guard at Night, perform'd by the whole Army ; which either at a Siege, or lying before an Enemy, every Evening draws out from its Tents or Huts, and continues all Night under Arms before its Lines or Camp, to prevent any Surprise. When Troops are much harass'd, or there is no great Apprehension of the Enemy, sometimes it is allow'd in the *Biovac*, that the two front Ranks, by Turns, stand under Arms, whilst the rear Ranks take some Rest on the Ground. The Word *Biovac* is a Corruption of the *German* *Weinack*, which signifies double Guard. 'To raise the *Biovac*', is to return the Army to their Tents or Huts, some time after Break of Day.

Blindes. Pieces of Wood to lay across the Trench, to bear the Fascines, or Claves laid on them, loaded with Earth, to cover the Workmen. This is generally done when the Work is about the Glacis, and the Trench is carry'd on facing the Place.

Blindes, are also sometimes only Canvas stretch'd to take away the Sight of the Enemy. Sometimes they are Planks set up, for which *vide* *Mantelets* ; others of Baskets, for which *vide* *Gabions* ; others of Barrels, and others of Sacks fill'd with Earth. But most properly *Blindes* are Bundles of Ozier, or other small Wood, bound at both Ends, and set up between Stakes or Claves. In short, they signify any thing that covers from an Enemy.

Blinde

B L

Blinde is also the same as *O-villon*, which see.

Blockade, or *Blocus*. Is in the Nature of a Siege, when Troops are posted on all the Avenues that lead to the Place, in order to keep any Supplies of Men or Provisions from going into it; so that it is propos'd to starve and waste it out, and not take it by regular Attacks. 'To form a Blockade' 'To raise a Blockade' 'To turn a Siege into a Blockade' are Phrases here used, and all very intelligible.

To *Blockade*, or block up a Place; To shut up all the Avenues, so that it can receive no Relief.

Blunderbuss. A short Fire-Arm with a very large Bore, to carry a Number of Musket or Pistol Bullets, proper to do Execution in a Crowd, or to make good a narrow Passage, as the Door of a House, a Stair-Case, or the like.

Bolts, in Gunnery, are of several Sorts. Those between the Cheeks of a Gun Carriage to strengthen the Transums, are called the *Transum Bolts*. The large Iron Knobs on the Cheeks of a Carriage, which keep the Hand-Spike steady, are called *Prise-Bolts*. The two short Bolts, that, when they are inserted in each End of an *English* Mortar Carriage, serve to traverse her, are call'd *Traverse-Bolts*. The Bolts that pass thro' the Cheeks of a Mortar, and keep it fix'd at the Elevation by the Help of Coins, are call'd *Bracket Bolts*. And the four Bolts that fasten the

B O

Brackets or Cheeks of a Mortar to the Bed, are called *Bed-Bolts*.

Bomb. An Iron Shell, or hollow Ball, with a large Touch-Hole to put in a Fusee, which is made of Wood, and full of a Composition that is to burn slowly, that it may last all the Time the Bomb is flying, and the Fire not come to the Powder within, till it falls, and so do Execution by firing what is about it, or by the Pieces of the Shell flying about. This Bomb is clapp'd into a Mortar-Piece, mounted on a Carriage, and when the Bombardier has set fire to the Fusee with one Hand, he gives Fire to the Touch-Hole of the Mortar Piece with the other. When the Bomb is fill'd with Powder, the Fusee is fix'd into the Vent or Touch-Hole, and pitch'd over to preserve it. When the Bomb is put into the Mortar, the Fusee is uncapp'd, and strew'd with Meal Powder. Bombs may be used without Mortar Pieces, as the *Venetians* did at *Candia*, when the *Turks* had possess'd themselves of the Ditch, rolling down Bombs upon them, along a Plank set slooping towards their Works, with Ledges on the Sides to keep the Bomb right forwards. They are also buried under Ground to blow it up, for which see *Caiffon*.

Bombardiers, Are those employ'd about a Mortar, who drive the Fusee, fix the Shells, load, and fire the Mortar, &c.

Bomb Ketch, Is a small Vessel made strong with large Beams, for

B O

or the Use of Mortars at Sea.

Bonnet. A Work consisting of two Faces, which make an Angle Saillant, in the Nature of a small Ravelin, without any Ditch, having only a Parapet, three Feet high, and pallisado'd, with another Palisado at ten or twelve Feet Distance. The *Bonnet* is made beyond the Counter-scarp, in the Nature of a little advanced *Corps de Garde*.

Bonnet a Prestre, or Priest's Cap. An Outwork, which at the Head has three Angles saillant, and two inwards, and differs from the double *Tenaille* only in this Point, that its Sides, instead of being parallel, are made like the *Queue d'Yronde*, or Swallow's Tail, that is narrowing or drawing close at the Gorge, and opening at the Head.

Boyau, or Branch of the Trenches. A Line, or particular Cut, that runs from the Trenches to cover some Spot of Ground, and is drawn parallel to the Works of the Place, that it may not be enfiladed, that is, that the Shot from the Town may not scour along it. Sometimes a *Boyau* is a Line of Communication from one Trench to another, when two Attacks are carry'd on near one another. The Parapet of a *Boyau* being always next to the Place besieged, it does the Service of a Line of Contravallation, to hinder Sallies, and cover the Pioneers.

Branch, see Boyau above.

Branch of a Mine. Vide *Gallery*.

B R

Breach. The Ruin of any Part of the Works, beaten down with Cannon, or blown up by Mines, preparatory to the giving an Assault. *To make good the Breach;* *To fortify the Breach with Chevaux de Frize,* or sow it with Crows Feet; *To make a Lodgment on the Breach;* *To clear the Breach;* that is, to remove the Ruins, that it may be the better defended; are the Phrases belonging to this Term.

To break Ground. To begin the Works for carrying on the Siege about a Town, or Fort. It is performed in the Night, by the Advantage of some hollow Way, or Eminence, or whatever will serve to cover and shelter the Men.

Breast Work. See *Parapet*.

The Breach of a Gun, Is the very End of it next the Touch-hole.

Bridge. The Word in general needs no Exposition: But this may be said in relation to it, that of late Years Copper and Tin Boats have been much used to be carried in Armies, for laying Bridges over Rivers upon Occasion, which is done by joining these Boats Side by Side, 'till they reach across the River, and laying Planks over them to make all plain for the Men to march upon. This is called a *Bridge of Boats.* See *Pontoon*.

Flying Bridge, or Pont volant, is made of two small Bridges, laid one over the other in such manner, that the uppermost stretches and runs out, by the Help

Help of certain Cords running through Pullies plac'd along the Sides of the Under Bridge, which push it forwards, 'till the End of it joins the Place it is design'd to be fixed on. When these two Bridges are stretch'd out at their full Length, so that the two middle Ends meet, they must not be above four or five Fathom long, because if longer they will break; and therefore they are only us'd to surprize Out-works, or Posts that have but narrow Moats.

Bridge of Rushes, or Pont de jonc. A Bridge made of great Bundles of Rushes that grow in marshy Grounds; which being bound together, have Planks fasten'd on them, and are so laid over Morasses or Boggy Places, for the Horse and Foot to march over. They have also been used to pass the Moat of a Place besieged, and are not so easy to be burnt as Fascines, tho' these be loaded with Earth.

Draw - Bridge. A Bridge made fast only at one End with Hinges, so that the other End may be lifted up, and then the Bridge stands upright to hinder the Passage of the Moat. There are others made to draw back to hinder the Passage, and to thrust over again to pass. Again, there have been others which open in the Middle, and one half of them turns away to one Side, and the other to the other Side, and so they are join'd again at Pleasure: But these are not so proper, because one half of them remains on the Enemy's Side. In the common Way they are

form'd with Plyers, twice the Height of the Gate, and a Foot Diameter: The inner Part is travers'd with a *St. Andrew's* Cross, which serves for a Counterpoize; and the Chains which hang from the other Extremities of the Plyers, to raise or fall the Bridge, are of Iron or Brass.

Bridge of Communication, is a Bridge thrown over a River, by which two Armies or Towns, separated by the River, communicate with each other.

Brigade. A Party, or Body, commanded by a Brigadier. There are two Sorts of Brigades, a Brigade of an Army, and a Brigade of a Troop of Horse. A Brigade of an Army is either of Horse or Foot, and not fixed of what Number or Force it must be; for the Brigade of Horse may consist of eight, ten, or twelve Squadrons, and that of Foot of three, four, five, or six Battalions. The eldest Brigade has the Right of the first Line; the second of the second Line; and the rest in Order, the youngest possessing the Centre. The Battalions, or Squadrons, which compose a Brigade, observe the same Order. The Brigade of a Troop of Horse is the third Part of it, when it does not exceed forty or fifty Men; but if the Troops be a hundred strong, it is divided into six Brigades. The Troops of Horse Guards in England are divided into several Brigades.

Brigade Major: An Officer appointed by the Brigadier to assist

assist him in the Affairs of his Brigade. The most able Captains are nominated to this Post. They act in the Brigade as Major Generals in the Armies, receiving the Orders of their Principals.

Brigadier. The General Officer that commands a Brigade. Brigadiers of the Army are those that command a Brigade of so many Squadrons of Horse, or Battalions of Foot, as was mention'd in speaking of the Brigade of an Army; they having the fifth Degree in the Army, being next in Command to the Major Generals, above whom are Lieutenant Generals, Generals, and, of late Years, Field Marshals. Every Brigadier marches at the Head of his Brigade upon Service. The Brigadier of Foot commands him of Horse in Garrison; and the Brigadier of Horse him of Foot in the Field. Brigadiers of the Horse Guards command as youngest Captains of Horse. Other Troops of Horse in *France* have Brigadiers, which they have not generally in *England*, where they are called Corporals of Horse: But there are in the *English* Horse Guards Sub Brigadiers, as well as Brigadiers.

Bringers up. The whole last Rank of a Battalion drawn up, being the hindmost Men of every File.

Budge Barrels. Are small Barrels well hoop'd, with only one Head. On the opposite End is nailed a Piece of Leather to draw together with

Strings like a Purse; their Use is for carrying Powder along with a Gun or Mortar, as they are less dangerous, and more portable than whole Barrels. They are also used on a Battery of Mortars, to contain Meal Powder.

Bullet, Ball, or Shot. The Ball of Iron, or Lead, that is fir'd out of a Cannon, Musket, or Pistol; for it comprehends all Sorts. That of the Royal, or whole Cannon, weighs 48lb. of the Bastard Cannon 42, of the ordinary Demi Cannon 32, of the 24 Pounder 24, of the large Culverin 18, of the 12 Pounder 12, of the large Demi Culverin 10, of the 6 Pounders 6, of the Saker 5 and a Quarter, of the Minion about 4, of the 3 Pounders 3, of the Drakes, Pedreroes, and Bases, gradually less. All these are of Iron. The Musket Ball is about an Ounce; the Carabine and Pistol, and those of Lead, less. *Red-hot Bullets* are shot in Sieges to fire Houses, and do the more Mischief in a Town. They are heated in a Forge made for that Purpose, close by the Battery, whence they are taken out with an Iron Ladle, and thrown into the Pieces, into which before a Tompion of Sod or Turf is ramm'd down, that the Bullet may not touch the Powder. It fires not only combustible Matter, but Floors and Planks.

Bulwark. The antient Name for a Bastion, or Rampart, now antiquated. See those Words.

C.

CADET. A young Gentleman, who, to learn Experience, and wait for Preferment, carries Arms as a private Man in a Company of Foot. He differs from a Volunteer, because he receives the Pay of a common Soldier; whereas a Volunteer serves without Pay. In France the King allows but two Cadets to be received into any one Company of Foot. The proper Signification of the Word is a younger Brother, and thence apply'd to bear this Sense, because younger Brothers take this upon them to raise their Fortunes. It also is taken for an Officer who, in respect of another, is younger in the Service.

Caïsson; or Superficial Fourneau. A Wooden Case or Chest, into which they put three or four Bombs, and sometimes to the Number of six, according to the Execution they are to do, or as the Ground is firmer or looser. Sometimes this Chest is only fill'd with Powder. When the Besieged dispute every Foot of Ground, the Caïsson is buried under some Work the Enemy intends to possess himself of, and when he is Master of it, they set Fire to it by a Train convey'd in a Pipe, which blows them up. Thus we may say, After the Mine or Fourneau had destroyed the Bonette, a Caïsson was buried under the Ground thrown up, and the Enemy ad-

vancing to make a Lodgment on the Ruins of the Bonette, the Caïsson was fir'd with a Saucidge, and blew up the Post the second time.

Caïsson, is also a cover'd Waggon, to carry Bread or Ammunition.

Caliber Compasses. Used by Gunners to measure the Diameter of Bullets, and the Cylinder of Guns; and therefore the Legs, instead of being strait, are made arching, to find the true Diameter of any Circle. They have a Quadrant fasten'd to one Leg, and passing through the other, mark'd with Inches, and Parts of an Inch, to preserve Exactness.

Caltrops. Vide Crow's Feet.

Camp. The Ground on which an Army pitches its Tents, and lodges, sometimes intrenching, and sometimes without any other Defence than chusing the Advantage of the Situation. It is mark'd out by the Quarter Master General, who allots every Regiment its Ground; in doing which he is to consult the Nature of the Country, both for Defence against the Enemy, and Supplies for the Army. It should have a Communication with Garrisons, have Plenty of Water, Forage, and Fuel, and either Rivers, Marshes, Hills, or Woods to cover it. An Army always encamps fronting the Enemy, and generally in two parallel

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parallel

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parallel Lines, about 500 Yards distant; the Horse and Dragoons on the Wings, and the Foot in the Centre. Three or four Brigades encamp between the two Lines, and are called the *Body of Reserve*. The Artillery and Bread Waggon are in the Rear of the two Lines. A Battalion of Foot is allow'd 80 or 100 Paces for its Camp, and 30 or 40 for an Interval between one Battalion and another. A Squadron of Horse has 30 Paces for its Camp, and 30 for an Interval, or more, if the Ground will allow it. Each Battalion posts a small Guard, commanded by a subaltern Officer, about 100 Yards before the Front of the Regiment, called the *Quarter Guard*. And each Regiment of Horse mounts a small Guard on Foot, called the *Standard Guard*. The *Grand Guard* consists of Horse, and is posted a Mile and a half distant towards the Enemy.

Flying Camp, or Army. A strong Body of Horse and Foot, commanded for the most Part by a Lieutenant General, which is always in Motion, both to cover its own Garrisons, and to keep the Army in continual Alarm. It is also used for the Ground on which such a Body of Men encamps.

Campaign. The Time every Year that an Army continues in the Field, during any War. We say, 'A Man has serv'd so many Campaigns.' The Campaign will begin at such a Time. 'This will be a long

C A

Campaign.' The Word is also used for the open Country before any Towns.

Cannons, Ordnance, Great Guns, or Artillery. Fire Arms, either of Brass or Iron, long, round, and hollow, charg'd with Powder and Ball, or Cartridge. There are several Degrees and Sizes of them, distinguish'd by these several Names: Cannon Royal, or Whole Cannon, or Cannon of Eight; Bastard Cannon, or Cannon of Seven: But those are both too large for common Use, to which the following are chiefly adapted: 1. Demi Cannon, carrying a Ball of 32 Pounds, and used in the Lower Tire of a First Rate Man of War. 2. 24 Pounders. 3. Whole Culverins, carrying 18 Pounds. 4. 12 Pounders. 5. Demi Culverins, or 9 Pounders. 6. 6 Pounders. 7. Sakers, carrying 5 Pounds and a Quarter. 8. Minions, carrying 4 Pounds; and lastly, 3 Pounders for Drakes, Slings, Cuts, and Pedreroes. See more of each under its proper Letter. Cannon often fir'd, must be carefully cool'd, or else it will burst. The Length of a true fortify'd Gun is about seven Diameters of the Metal at the Vent, the Diameter of the Metal there being three Diameters of the Bore; so that a 24 Pounder being six Inches in the Diameter of her Bore, the Thickness of the Metal at the Vent must be a Foot and a half, and her Length thirteen Foot and a half. See more under *Battery, Cavalier, Embrasures*;

Embrazures; to Nail, to Recoil, and Carriages; also the Names of the several Guns respectively.

Cannon Royal, or of Eight. A great Gun eight Inches Diameter in the Bore, 8000 Pounds Weight, the Length and Thickness in the Proportion mention'd in the last Article. It carries a Charge of 32 Pounds of Powder, and a Ball seven Inches and four Eighths Diameter, and 48 Pounds Weight. Its Point-blank Shot 185 Paces.

Cannon Baskets. Vide *Gabions*.

Canvas Bags, or Earth Bags, are Bags containing about a Cubical Foot of Earth. They are used to raise a Parapet in Haste, or repair one that is beaten down. These are of Use when the Ground is rocky, and affords not Earth to carry on Approaches, because they can be easily brought from afar off, and removed at Will. The *French* call them *Sacs-a-Terre*, that is, *Earth Bags*. The same Bags, upon Occasion, are us'd for Powder, and hold 50 Pounds.

Capital. A Line drawn from the Angle of the *Polygon*, to the Point of the *Bastion*.

Capitulation. The Conditions on which a Place that is besieg'd surrenders, being Articles agreed on between the Besieg'd and Besiegers.

Caponiere. A Work, or Lodgment, sunk four or five Feet into the Ground, with a Parapet on its Sides made with the Earth thrown out of it, rising about

two Feet above the Ground, on which they lay Planks well cover'd with Earth. They are big enough to lodge 15 or 20 Musketeers, who fire upon the Besiegers through Embrazures made on the Sides. These are generally made on the *Glacis*, or in dry Moats.

Captain. The Commander in chief of a Company of Foot, or Troop of Horse, or Dragoons. He is to march, or fight, at the Head of his Company. Among the Horse, when Captains of several Regiments meet, he that has the eldest Commission takes Place and commands; but among the Foot, the Captain of the eldest Regiment commands all that are of younger Regiments, tho' they have elder Commissions. A Captain has the Power of making Serjeants and Corporals in his own Company. He ought to be very vigilant, and acquainted with the Dispositions of all his Men.

Captain-Lieutenant. The Commanding Officer of the Colonel's Troop, or Company, in every Regiment. He commands as youngest Captain, tho' in reality he is only Lieutenant, the Colonel being himself Captain. In *France* there are several Captain Lieutenants, as those of the two Troops of *Musquetaires*, of *Gendarmes*, and the Independent Troops of Light Horse, whereof the King, Queen, Dauphin, or Duke of *Orleans*, are Captains. Those of the *Musquetaires*, *Gendarmes*, and Light Horse, whereof himself is Captain,

tain, take Place as eldest Colonels of Light Horse, and accordingly command all others. The Captain Lieutenants of the Queen's, Dauphin's, and Duke of Orleans's Troops, and the Sub-Lieutenants of the King's Gendarmes, rank with all Colonels of Horse, according to the Date of their Commissions.

Captain en Pied. A Captain kept in Pay, that is not reform'd. The Expression occurs sometimes.

Captain Reform'd. One, who upon reducing of the Forces loses his Company, yet is continued Captain, either as Second to another, or without Post. Vide *Reform'd.*

Captain en Second. Vide *Second.*

Captain des Guards, & aux Gardes. Tho' this Distinction be peculiar to France, it occurs so often, that it requires to be explain'd. The English of it is, Captain of the Guards, or in the Guards. *Captain des Gardes*, or Captain of the Guards, is Captain of one of the Four Troops of Horse Guards. *Captain aux Gardes*, or Captain in the Guards, is the Captain of a Company in a Regiment of the Foot Guards.

Carabine. A small Fire Arm between a Pistol and a Musket, used by all the Horse. It carries a Ball of 24 in the Pound.

Carabiniers. Regiments of Light Horse, carrying longer Carabines than the other Horse, and used sometimes as Foot, like the Dragoons.

Carcass. A mischievous Invention in the Nature of a Bomb, and thrown like it out of a Mortar piece. It is composed of fine Meal-powder, Saltpetre, Sulphur, broken Glass, Shavings of Horn, Pitch, Tallow, and Linseed Oil; sometimes of two, three, or more Granadoes, and several small Pistol Barrels, charged and wrapp'd up with the Granadoes in Tow, dipp'd in Oil, and other combustible Matter. The whole is put into a pitch'd Cloth, made up oval, which is set in an Iron like a Lanthorn, having a hollow Top and Bottom, and Bars running between them to hold them together: These long Bars, that join the Top and Bottom, are bound together by one or more Iron Rings; all which, in some Measure, represents the Trunk of a dead Carcass. One of the concave Places has a Ring to lift, and put it into the Mortar-piece; the other has a Touch-hole to set fire to the Carcass, which is shot like a Bomb upon any Place intended to be fired. These Carcasses do not answer so much as was expected from them. There are other Carcasses for the Sea-service, which differ from a Bomb only in the Composition, and the five Holes from which it burns when fired.

Carriages for Guns. Are in the Nature of long narrow Carts, each made to the Proportion of the Gun it is to carry. When they stand upon Batteries, they have but two Wheels, and so they

they are fired; but when drawn, two other less Wheels are added, beyond the Breech of the Piece. The Carriages for Mortars are low, with four Wheels each, of one Piece, exactly like the Sea-Carriages.

To carry on the Trenches. Vide *Trenches*

Cartel. An Agreement between Princes at War, for the Exchange of Prisoners.

Cartouch. A Case of Wood about three Inches thick at Bottom, girt round with Marlin, holding about 400 Musket Balls, besides six or eight Balls of Iron of a Pound each. It is fired out of a Haubitz, a small Sort of Mortar to defend a Pass. Other Sorts, of different Inventions, have been made for Mortars, and some for great Guns, to use instead of Partridge Shot.

Cartridge. A Roll of Paper, Pasteboard, or Parchment, like a Case, made to contain the Charge of any Fire Arm. Cartridges for Pistols and Muskets are made of Paper, which is sufficient to contain that Charge of Powder and Ball; but they are of Pasteboard, or Parchment, to hold the Shot, broken Iron, and Powder to charge Cannon, when it is to fire near at Hand. In Cannon of Cazemattes, or other Posts that defend the Passage of the Ditch, or the like, these have a dreadful Effect.

Cartridge Box. A Case of Wood, or turned Iron, holding a Dozen Musket Charges. It is worn upon a Belt, and hangs

a little higher than the right Pocket Hole.

Cascabel. The very hindmost Knob of the Cannon, or utmost Part of the Breech.

Castle. A Place strong either by Art or Nature, whether in a City, or in the Country, to keep the People in Obedience. A Sort of a little Citadel.

Cavalier, or Mount. A great Elevation or Mass of Earth, sometimes round, and sometimes a long Square, usually situated in the Gorge of a Bastion. On the Top of it is a Platform, with a Parapet to cover the Cannon thereon, and Embrazures to fire them thro'. The Height of it must be proportionable to that Part of the Enemy's Ground, or Works, it is designed to overlook or command. Those which are rais'd upon the Enclosure of any Place, whether in the Middle of the Curtin, or in the Gorge of a Bastion, are generally 15 or 18 Feet higher than the *Terrain* of the Rampart. The Breadth of them is to be regulated by the Number of Cannon designed to be planted on them, observing that there must be 10 or 12 Feet Distance allowed between every two Guns, for the Convenience of the Gunners. They are a double Defence for the Faces of the opposite Bastion, defend the Ditch, break the Enemies Galleries, command the Traverses in dry Moats, scour the Sallant Angle of the Counterscarp, and enslave the Enemies Trenches.

Cavalry

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Cavalry. That Body of Soldiers that serves and fights on Horseback. These are either regimented, or independent Troops, as the Troops of Guards in *England*; and in *France* the Gendarmes, and Musquetaires on Horseback. All these upon Service are drawn up in Bodies, call'd Squadrons, a Number of which form a Brigade.

Carvin. A natural Hollow, fit to cover Troops, and facilitate their Approach to a Place. If it be within Musket-shot, it is a Place of Arms ready made to Hand, and a Conveniency for opening the Trenches, out of Fear of the Enemy's Shot.

Cazematte. A Platform in that Part of the Flank of a Bastion next the Curtin, somewhat retir'd, or drawn back towards the Capital of the Bastion. Sometimes it consists of three Platforms, one above another, the *Terre-plain* of the Bastion being the highest; for which Reason the *French* give the others the Names of *Places Basses*, or low Places. Behind their Parapet, which fronts along the Line of the Flank, there are Guns planted, loaded with Cartridges of small Shot, to scour along the Ditch; and these Guns are covered from the Enemy's Batteries by circular, or sometimes square Earth Works, faced or lined with Wall, and called *Orillons*, *Shoulders*, or *Epaulments*. The *Cazematte* is the most excellent Defence a Place can have.

Cazernes, or *Barracks*. Little

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Rooms, or Lodgments, generally built between the Rampart and Houses of a fortified Town, to quarter Soldiers for the Ease of the Inhabitants. There are generally two Beds in each Cazern, for six Soldiers to lie, three and three; but so that the third Part being always upon guard, there are but four left in the Cazern, or two in a Bed.

Center. The Middle Point of any Work or Body of Men. The Pikes used to be in the Center of the Battalion; the Infantry, and among them, the youngest Regiments, are in the Center of the Army. From the Center of a Place are drawn the first Lines to lay down the Form of a Fortification.

Chace of a Gun. The whole Length of it.

Chain for Engineers, is nothing but a Sort of Wire-chain, divided into Links of an equal Length, which Engineers make use of for setting out Works on the Ground, because the Line is apt both to shrink and give Way.

Chain Shot. Vide *Shot*.

Chamade. A Signal made by the Enemy, either by Beat of Drum, or Sound of Trumpet, when they have any Matter to propose. Otherwise call'd, *To sound*, or *beat a Parley*, which is the more proper *English*; But *Chamade* begins to grow familiar, as do all other *French* Terms in Martial Affairs. We say, *The Besiegers beat the Chamade or Parley, to have Leave to bury their*

their Dead; The Besieged beat the Chamade or Parley, when they capitulated.

Chamber of a Gun. That Part of the Chace where the Powder and Shot lie.

Chamber of a Mine. Vide *Foucade.*

Chamber of a Mortar. Where the Powder lies also. It is much narrower than the rest of the Cylinder, and of different Forms; but the most common Form is cylindrical.

Chamber of a Battery. Called Powder Chamber, or Bomb Chamber. A Place sunk under Ground, for holding the Powder or the Bombs, where they may be out of Danger, and preserved from Rains.

Chandeliers. Wooden Frames, large and strong, to pile Faggots against, one upon another, to cover the Workmen instead of a Parapet. These are to remove from Place to Place, as Occasion requires, upon sudden Emergencies, or whilst the Trenches are digging. Sometimes they are only strong Planks, with two Pieces of Wood perpendicular, for the Fascines to bind between: But they are made in other Forms for other Occasions.

Charg'd Cylinder, or Chamber. That Part of a Cannon which contains the Powder and Shot.

Chausse. Res de Chausse. The Level of the Field, the plain Ground.

Chausse Traps. See *Crow's Feet.*

Cheeks of a Mortar. Strong

Planks of near a semicircular Form, bound with thick Iron Plates, and fixed by Bolts to the Bed. They keep the Mortar at any given Elevation.

Chemin Couvert. See *Covert Way.*

Chemin des Rondes, or Way of the Rounds. A Space between the Rampart, and the low Parapet under it, for the Rounds to go about. It is the same as the *Fausse Braye.* Vide *Fausse Braye.*

Chemise. A Word almost out of Date, formerly signifying the Wall that faced or lined a Work of Earth, especially when the Soil was sandy and loose, and therefore could not support itself, without allowing it too great a *Talus*, or Stoop.

Chevaux de Frise. The same as Turnpikes; only some will have it, that the Chevaux are stronger than the Turnpikes: But there is no other Difference than in the Language, one being the *French*, the other the *English* Name; yet both indifferently now used in *England*, and the *French* rather the most. See *Turnpikes.*

Cinquain. An ancient Order of Battle, to draw up five Battalions, so that they may make three Lines, that is a Van, Main Body, and Body of Reserve. Supposing the five Battalions to be in Line, the 2d and 4th advance and form the Van, the 3d falls back for the Rear Guard, or Body of Reserve, the 1st and 5th form the Main Body upon the same Ground. Then every

every Battalion ought to have a Squadron of Horse on its Right, and another on its Left. Any Number of Regiments produc'd by the Multiplication of the Number 5, as 10, 15, 20, &c. may be drawn up in the same Manner.

Circumvallation. A Line, or Trench, with a Parapet, thrown up by the Besiegers, a Cannon-shot from the Place, encompassing all their Camp, to defend it against any Army that may attempt to relieve the Place: So that the Army besieging lies between the two Lines of Contravallation and Circumvallation, the former against the Besieged, and the latter against those that shall pretend to relieve them. The Top of the Line of Circumvallation is generally about seven Feet deep, and about 12 Feet broad. The Parapet runs quite round the Top of it, and at certain Distances it is strengthened with Redoubts and small Forts. The Base of it is generally about eight Foot wide, the Height Withinside six, and on the Outside five, with a Banquet of three Foot wide, and one and a half high. The Line of Circumvallation must never run along the Foot of a rising Ground, because, if an Enemy shall possess himself of the Height, he might plant Cannon there, and command the Line.

Citadel. Is a Port with four, five, or six Bastions, raised on the most advantageous Ground about a City, the better to command it, and commonly divided

from it by an *Esplanade*, or open Space, the better to hinder the Approach of an Enemy. So that the Citadel defends the Inhabitants, if they continue in their Duty, and punishes them if they revolt. Besiegers always attack the City first, that, being Masters of it, they may cover themselves the better against the Fire of the Citadel. Its having Bastions distinguishes it from a Castle. Sometimes the Citadel stands half within, and half without the Ramparts of the Place.

Clayes. Are the same we commonly call *Hurdles*, or *Wattles*, being made of strong Stakes, interwoven with Oziers, or other small pliable Twigs, and the closer the better. They are generally about five or six Feet long, and three, or three and a half broad. The Use of them is to cover Lodgments over Head, with much Earth heap'd on them to secure the Men against the Fire Works, and Stones thrown by the Besieged. They are also cast into a Ditch that has been drain'd, for the Besiegers to pass over on them without sticking in the Mud.

To clear the Trenches. To beat out those that are to guard them with a vigorous Sally from the Place besieged; to throw down the Parapet, fill the Trench, and nail the Cannon.

To Clay Gam. Vide *To Nail.*

Coffre. A Depth sunk in the Bottom of a dry Ditch, of about six or seven Foot wide, and the Length of it the whole Breadth of the said Ditch from Side to Side.

Side. It is cover'd with Joists, Hurdles, and Earth rais'd two Feet above the Bottom of the Ditch; which Rising serves instead of a Parapet, with Loop-Holes in it: And this Work, being made at Leisure by the Besieged, serves to fire on the Besiegers, when they attempt to cross the Ditch. Its Length distinguishes the *Coffre* from the *Caponniere*, which does not reach the whole Breadth of the Ditch; and it differs from the *Traverse* and *Gallery*, in that these two are made by the Besiegers, and the *Coffre* by the Besieged. The Besiegers *epaule*, or cover themselves against the *Coffres*, by throwing up the Earth on that Side on which the Musketeers in it fire.

Coffre, is also taken for the same as *Caisson*. Vide *Caisson*.

Colonel. The Commander in Chief of a Regiment, either of Horse, Foot, or Dragoons in England: But in France and Spain they call the Colonels of Horse *Maitres de Camp*. Colonels of Foot take Place, and command one another, according to the Antiquity of their Regiments, and not of their Commissions; but those of Horse, on the contrary, according to the Date of their Commissions, without regard to the Antiquity of the Regiments. Their Posts at the Head of the Regiments is three Paces before the Captains. Generals of Horse, Foot, and Dragoons are usually Colonels, whose Authority extends particularly over each of their re-

spective Bodies. A Colonel may lay an Officer of his Regiment in Arrest, but must acquaint the General with it. He is not allow'd a Guard, but only a Centinel from the Quarter Guard.

Column. The long File, or Row of Troops, or of the Baggage of an Army on its March. So, 'To march in a Column', is to march a great Depth, or in a long File, instead of making a large Front. An Army marches in one, two, three, or more Columns according as the Ground will allow, and the Chief General sees expedient, each Column being led by a General Officer.

Command. Word of Command. The Terms used by Officers in Exercise, or upon Service.

Commanding Ground. A rising Ground which overlooks any Post, or strong Place. There are three Sorts of Commanding Grounds.

A Front Commanding Ground. A Height opposite to the Face of the Post which plays upon its Front.

A Reverse Commanding Ground. An Eminence, which plays upon the Back of a Post.

An Enfilade Commanding Ground, or Curtain Commanding Ground. A high Place which with its Shot scours all the Length of a Line.

Commissary General of the Musters, or Muster Master General. He takes Account of the Strength of every Regiment, as often as the General pleases; reviews them,

them, sees the Horse be well mounted, and all the Men well arm'd and accoutred. He receives and inspects the Muster Rolls, and knows exactly an Army's Strength.

Commissary General of the Stores. An Officer in the Artillery, who has the Charge of all the Stores, for which he is accountable to the Office of Ordnance. He is allow'd an Assistant, Clerks, and Conductors under him.

Commissary of the Horses. An Officer likewise of the Artillery, who has the Inspection of the Artillery Horses, having under him a Number of Conductors of Horses for his Assistants.

Commissary General of Provisions. Has the Charge of furnishing the Army with all Sorts of Provisions, and must be very vigilant and industrious, that they may never suffer Want.

Commission. The Authority by which every Officer acts in his Post, sign'd by the King, or by his General, if he be impower'd.

Commission Officers. Vide Officers.

Communication. See Line of Communication.

Company. A small Body of Foot, the Number never fix'd, but generally from 50 to 75, commanded by a Captain, who has under him a Lieutenant and an Ensign, and sometimes two Lieutenants. A Company has usually three Serjeants, three Corporals, and two Drums. In the Guards the Companies con-

sist of 80 Men each. Formerly two Thirds of the Company were arm'd with Muskets, and the rest with Pikes.

Independent Company. That which is not incorporated in a Regiment.

Complement of the Curtin. Is that Part of the interior Side which forms the Demigorge.

Contravallation. A Trench with a Parapet, which the Besiegers cover themselves with, next the Place besieged, to defend them against the Sallies of the Garrison: So that the Army forming a Siege, lies between the Lines of Circumvallation and Contravallation. This Line is carried on without Musket Shot of the Town, and sometimes goes quite round it, sometimes not, according as the General sees Occasion. It should be made in the same Manner as the Line of Circumvallation. Which Word see.

Contre Queue d'Yronde, or Counter Swallow's Tail. An Outwork in the Form of a single Tenaille, wider next the Place, that is, at the Gorge, than at the Head, or next the Campaign; which is the contrary to the *Queue d'Yronde, or Swallow's Tail*, this being the widest at the Head. The Sides of the *Contre Queue* are not so well flank'd from the Place as those of the *Queue d'Yronde, or Swallow's Tail*, and therefore it is not so good.

Contribution. An Imposition, or Tax, paid by all Frontier Countries, to redeem themselves

from being plunder'd and destroy'd by the Enemy.

Conversion. A Military Motion, which turns the Front of a Battalion where the Flank was, when the Flank is attack'd.

Convoy. A Supply of Men, Money, Ammunition, and Provisions, convey'd into a Town, or to an Army. The Body of Men likewise that marches to secure any thing from the Enemy is called a Convoy.

Copper Boats. Vide *Bridge*.

Corbeilles. Vide *Baskets*.

Cordeau. A Line divided into Fathoms, Feet, &c. to mark Outworks on the Ground, us'd by Engineers.

Cordon. Is a Butting out of Stone, commonly round, running round the Wall towards the Top.

Coridor. Vide *Covert-way*.

Cornet. The third Commission Officer belonging to every Troop of Horse, subordinate to the Captain and Lieutenant, equivalent to the Ensign among the Foot. His principal Duty is to carry the Standard, near the middle of the first Rank of the Squadron.

Cornish-ring of a Gun. The next Ring from the Muzzle backwards.

Corporal. An inferior Officer of Foot, under a Serjeant, who has Charge of one of the Divisions of a Company, places and relieves Centinels, and keeps good Order in the *Corps de Garde*. He receives the Word of the inferior Rounds that pass by his *Corps de Garde*. Every Com-

pany, if small, has usually three Corporals; but more, if numerous.

Corps de Garde. A Post sometimes under Covert, and sometimes in the open Air, to receive a Number of Men who are relieved from Time to Time, to watch in their Turns for the Security of some more considerable Post. This Word *Corps de Garde*, does not only signify the Post, but the Men in it.

Corps de Bataille. The main Body of an Army drawn up for Battle, whereof the first Line is call'd the *Van*, the second the *Corps de Bataille* or *Main Battle*, and the third the *Corps de Reserve*, *Body of Reserve*, or *Rear Guard*. Vide *Battle*.

Corps de Reserve. Vide *Line of Battle*, and *Rear Guard*.

Covert-way. In French, *Che-min Covert*, or *Coridor*. A Space of Ground level with the Field, upon the Edge of the Ditch, three or four Fathom wide, and cover'd with a Parapet, or Breast work, running all round the Moat, and sloping gently towards the Campaign. It has also a Foot-bank or Banquet. One of the greatest Difficulties in a Siege, is to make a Lodgment on the *Covert-way*, because generally the besieged Pallisadoe is along the Middle, and undermine it on all Sides. This is commonly call'd the *Counter-scarp*, because it is on the Edge of it. The Slope is called the *Glacis*. The Parapet of a *Covert-way* is about six Foot high, and forms a saillant Angle before the

the Curtin, which serves for a Place of Arms.

Counter Approaches. Lines or Trenches carried on by the Besieged, when they come out to attack the Lines of the Besiegers in Form, or prevent Approaches. See *Counter Trenches*.

Counter Battery. A Battery that plays upon another, to dismount the Guns.

Counter Guard, in French Contre Guard, or Envelope. A small Rampart, with a Parapet and Ditch, to cover some Part of the Body of the Place. There are Counter Guards of several Shapes, and differently situated. Those raised before the Point of a Bastion, consist of two Faces, making an Angle Saillant, and parallel to the Faces of the Bastion. Those which cover one of the Faces of the Bastion, are shap'd like a Demi Bastion, with a Parapet upon the Face and Capital, but none on the Flank, which must be open and exposed to the Fire of the Place. This Name of *Counter Guard* is not much in Use at present among Engineers, who call it usually an *Envelope*.

Counter Line. Vide *Contravallation*.

Countermarch. When the Files countermarch, it changes the Face, or Front, of the Battalion; and when Ranks countermarch, it is exchanging the Wings of the Battalion. The Files countermarch to bring those that are in the Front to the Rear, which is proper when a Battalion is charged in the

Rear, and the Commander would have the File Leaders, who are generally chosen Men, take the Place of the Bringers up. The Ranks countermarch, when it is required that one Wing of the Battalion should exchange its Ground with the other. An Army countermarches to disappoint or amuse an Enemy, when going suddenly to any Project.

Counter mine. A Well, or Hole, sunk into the Ground, from which a Gallery or Branch runs out under Ground, to seek out the Enemy's Mine, and disappoint it. The Word is also used when the Besiegers have passed the Fort, and put the Miner to the Foot of the Rampart. These Countermines are either made when the Bastion is raised, or afterwards, when it is attack'd.

Counterscarp. Is properly the exterior *Talus*, or Slope of the Ditch, on the farther Side from the Place, and facing it. But by this Name is commonly meant the *Covert-way* and *Glacis*, and in this Sense, it is said the Enemy "attack'd the Counterscarp, or 'lodg'd themselves on the Counterscarp."

Counterscarp, Ditch of the Counterscarp. Vide *Avant Fosse*.

Counter Swallow's Tail. See *Contre Queue d'Yronde*.

Counter Trenches. Trenches cast up against the Besiegers, which consequently have their Parapet towards them, and are enfiladed from several Parts of the Place, to hinder the Enemy from making Use of them, when they are

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are Masters of them. But Care must be taken that they be not enfiladed, or commanded by any Eminence possessed by the Enemy.

Croats. Properly the People of Croatia: But in France there is a Regiment of Horse so called, because at first they were of that Nation, tho' now they are all French, as are those they still call the *Scotch Gendarmes*. These *Croats* are commanded upon all desperate Services; and therefore in a Battle they are posted on the Wings, a little advanced before the other Squadrons, upon the Line with the Dragoons. See *Pandours*.

Crown Work. In French *Outrage a Couronne*. An Outwork that takes up more Ground than any other. It is made up of a large Gorge, and two Sides terminating towards the Campaign in two Demi Bastions, each of which is join'd by a particular Curtin to a whole Bastion, that is at the Head of the Work. Crown Works are made to cover some large Spot of Ground, to secure some Eminence, or to defend the Head of a Camp that is intrench'd.

Crowsfeet, Caltrops, or Chaufse-trapes. Four-pointed Irons so made, that what Way soever they fall, one Point is up, being two, three, or four Inches long; the short ones to strew on Bridges, or Planks, the longer on the Earth. Both to incommode the Cavalry, that they may not approach without great Difficulty,

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the Point that sticks up running into the Horses Feet.

A Cube. A general mathematical Term, signifying a solid Body, every way square.

Cubical. The Body that is so solid and square; as a Cubical Foot, that is, a Footsquare every way of any Substance.

Cuirassiers. Horse that wear Armour, as Back, Breast, and Head Pieces. Most of the German Cavalry are Cuirassiers, as are also some of the French; but we have had none in England since the last Revolution.

Culverin of the least Size. A Gun five Inches Diameter in the Bore, 4000lb. Weight, takes a Charge of ten Pounds of Powder, and carries a Ball four Inches and six Eighths Diameter, and 16 Pounds Weight. Its Random Shot is 180 Paces.

Culverin Ordinary. Is five Inches two Eighths Diameter in the Bore, 4500 Pounds Weight, takes 11 Pounds 6 Ounces Charge of Powder, and carries a Ball 5 Inches Diameter, and 18 Pounds Weight.

Culverin of the largest Size, is 5 Inches 4 Eighths Diameter in the Bore, 4800lb. Weight, takes a Charge of 12 Pounds 8 Ounces of Powder, and carries a Shot 5 Inches and 2 Eighths Diameter, and 20lb. Weight. This and the last are good battering Cannon, but too heavy for Field Service.

Curtin. That Part of the Wall, or Rampart, that lies between the Flanks of two Bastions.

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Bastions. Besiegers seldom carry on their Attacks against it, because it is the best flank'd of any Part, but on the Faces of the Bastions, which are defended but by one Flank.

Cuttings off. Vide *Retrenchments*.

Cunette, or Cuvette. A deeper Trench cut along the Middle of the dry Ditch, and generally carried down 'till there be Water to fill it. This is a Ditch within a Ditch, and runs all the

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Length of it, the better to keep off the Enemy. The Breadth of it ought to be 18 or 20 Feet. It is good to prevent the Besiegers mining.

Cylinder. Concave Cylinder of a Gun, all the hollow Length of a Piece, or the Bore.

Charged Cylinder. The Chamber, or that Part which receives the Charge of Powder and Shot.

Vacant Cylinder. That Part of the Hollow which remains empty when the Gun is charg'd.

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Décagon. A Polygon Figure that has ten Sides and as many Angles, capable of being fortified with ten Bastions.

To Decamp. To raise the Camp, to break up from the Place where the Army lay encamped, and march away.

Defence. Line of Defence. Vide *Line*.

Defence of a Place. All those Parts of a Fortification that flank other Parts, as the *Parapets*, *Cazemattes*, or *Fausse Brayes*, which face and defend those Posts that are opposite to them. It is almost impossible to fix the Miner to the Face of a Bastion, 'till the Defences of the opposite Bastion are ruin'd; that is, 'till the Parapet of its Flank is beaten down, and the Cannon in all Parts, that can fire upon that Face which is attack'd, are dismounted.

To be in a Posture of Defence,

Is to be ready and provided to oppose an Enemy. As 'Our Redoubt is in a good Posture of Defence;' that is, the Work of it is finish'd, and it can oppose an Enemy.

Defile. A narrow Pass, or Way, where Troops cannot march but by making a small Front, and therefore are forced to file off, which gives the Enemy an Opportunity of charging them more advantageously, because the Rear cannot come up to relieve the Front.

To defile, Is to reduce an Army to a small Front, to march thro' such a narrow Passage.

Degree. Tho' this Term properly belongs to Geometry, it is so often used in Fortification, that it will not be improper to declare it is a small Part of an Arch of a Circle, whereof every Circle contains 360, which serve to measure the Content of the Angle.

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Angle. So we say an Angle is of 20, of 50, or of 70 Degrees, or more. *Vide Angle.*

Demi Bastion. *Vide Bastion.*

Demi Cannon lowest. A great Gun that carries a Ball of 30lb. Weight, and 6 Inches Diameter. Its Charge of Powder 14lb. It shoots point-blank 156 Paces. The Weight of it 5400lb. the Length 11 or 12 Feet. The Diameter of the Bore 6 Inches, two 8 Parts.

Demi Cannon ordinary. A great Gun 6 Inches 4 Eighths Diameter in the Bore, 12 or 13 Feet long, weighs 5600lb. takes a Charge of 17 Pounds 8 Ounces of Powder, carries a Shot 6 Inches 1 sixth Diameter, and 32lb. Weight, and shoots point-blank 162 Paces.

Demi Cannon of the greatest Size. A Gun 6 Feet, 6 eight Parts Diameter in the Bore, from 12 to 14 Feet long, 6000lb. Weight; takes a Charge of 18lb. of Powder; carries a Ball 6 Inches 5 Eighths Diameter, and 36lb. Weight. This Piece shoots point-blank 180 Paces.

Demi Culverin of the lowest Size. A Gun 4 Inches 2 Eighths Diameter in the Bore, 8 or 9 Feet long, 2000lb. Weight; takes a Charge of 6 Pound 4 Ounces of Powder, carries a Ball 4 Inches Diameter, and 9lb. Weight, and shoots point-blank 174 Paces.

Demi Culverin Ordinary. A Gun 4 Inches 4 Eighths Diameter in the Bore, 9 Feet long, 2700lb. Weight, charg'd with 7 Pounds 4 Ounces of Powder;

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carries a Ball 4 Inches 2 Eighths Diameter, and 10 Pound 11 Ounces Weight. It shoots point-blank 175 Paces.

Demi Culverin, elder Sort. A Gun 4 Inches and 6 Eighths Diameter in the Bore, 10 Feet in Length, 3000 Pounds Weight, charg'd with 8 Pounds 8 Ounces of Powder, and carries a Ball 4 Inches 4 Eighths Diameter, and 12 Pounds 11 Ounces Weight. Its point-blank Shot 178 Paces. The Demi Culverins are very good Field Pieces.

Demi Gorge. Half the Gorge, or Entrance into the Bastion, not taken directly from Angle to Angle where the Bastion joins to the Curtin, but from the Angle of the Flank to the Centre of the Bastion, or Angle the two Curtins would make, were they protracted to meet in the Bastion. *Vide Gorge.*

Depth of a Squadron or Battalion. The Number of Men there is in a File. That of a Squadron is always three, and that of a Battalion generally six. So we say, the Battalion is drawn up six deep, or five deep.

Descents into the Ditch. Trenches or Guts made by way of *Sappe*, in the Ground of the Counterscarp, under the *Covert-way*, and cover'd with *Maddriers*, that is, Planks, or with *Clays*, that is, Hurdles close bound together, and well loaded with Earth to secure them against Fire. In Ditches that are full of Water, the Descent is made even to the Superficies of the Water, and then the Ditch is filled.

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filled with Faggots fast bound and cover'd with Earth. In dry Ditches the *Sappe* is carried down to the Bottom, and they make *Traverses* in it, either to lodge themselves, or secure the Miner.

Deserter. A Soldier that runs away to the Enemy, or that quits the Service without Leave, or runs from one Regiment to another. Deserters are punish'd with Death.

Detachment. A Number of Men drawn out of one or more greater Bodies; either to mount Guards, make an Attack, scour the Country, or other Service. Sometimes a flying Army is made up of Detachments instead of whole Regiments.

To dismount. The vulgar and general Meaning is to unhorse, as, to dismount Cavalry: But,

To dismount Cannon, is to throw them off the Carriages, break these, and render them unfit for Service.

Dispart. To dispart a Cannon, is to set a Mark on the Muzzle Ring to be of an equal Height, or Level with the Base Ring; so that a Line drawn between them shall be parallel to the Axis of the Concave Cylinder, for the Gunner to take Aim by it at the Mark he is to shoot; for the Bore and this being parallel, the Aim taken by it must be true. This Line is called *the Dispart of a Gun*, and is found by a Pair of Calliber Compasses.

Ditch. Vide *Moat*.

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Ditch of the Counterescarp. Vide *Avant Fosse*.

Divisions of a Battalion. The several Parcels into which a Battalion is divided in marching, consisting generally of about six Files each, and led by the Lieutenants and Ensigns, the Captains marching in the Front and Rear. The Divisions of an Army are the Brigades.

Dodecagon. A Figure that has twelve Sides, and as many Angles, capable of being fortify'd with the same Number of Bastions.

Doffer. A Basket of a peculiar Form, flat on one Side, for the Men to carry Earth in upon their Backs.

Don-jon, is a Place of Retreat, to capitulate with more Advantage, in Case of Necessity.

Double Tenaille. Vide *Tenaille*.

To Double. To put two Ranks into one, or two Files into one, according as the Word of Command expresses it. As *Double your Ranks,* is for the second, fourth, and sixth Ranks to march into the first, third and fifth; so that of six Ranks they make but three, leaving double the Interval there was between them before; which is not so when they double by half Files, because then three Ranks stand together, and the three others come up to double them; that is, the first, second and third, are doubled by the fourth, fifth and sixth, or the contrary. *Double your*

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your Files, is for every other File to march into that which is next to it on the Right or Left, as the Word of Command directs, and then the six Ranks are turn'd into twelve, the Men standing twelve deep, and the Distance between the Files is double what it was before.

Dragoons. Musqueteers mounted, who serve sometimes on Foot, and sometimes on Horseback; being always ready upon any Thing that requires Expedition, as being able to keep Pace with the Horse, and do the Service of Foot. In Battle, or upon Attacks, they are commonly the *Enfans Perdus*, or Forlorn Hope, being the first that fall on. In the Field they encamp either at the Head of the Army, or on the Wings, to cover the others, and be the first at their Arms. They are divided into Brigades, as the Cavalry, and each Regiment into Troops. They have Colonels, Lieutenant Colonels, Captains, Lieutenants, and Cornets like the Horse, and Sergeants and Corporals like the Foot, but are look'd upon as Foot. Their Martial Musick is Drums, and sometimes Bassoons and Hautboys.

Draw Bridge. Vide *Bridge*.

Drain. A Trench cut to draw the Water out of a Moat. As soon as the Moat is drain'd, they cast into it a Claye, cover'd with Earth, or Bundles of Rushes with Planks on them, to make a Passage over the Mud.

Droit Attacks. Vide *Attacks*.

Drum. Either the Martial

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Instrument itself us'd by Foot and Dragoons, or the Man that beats it; which is done after several Manners, either to give Notice to the Troops of what they are to do, or to demand Liberty to make some Proposal to an Enemy. Every Regiment of Foot has a Drum Major, who commands all the rest, and every Company has two, three, or four Drums, as the Men are in Number. To *beat the General*, is to give Notice to the Forces that they are to march. To *beat the Assembly*, or *Troop*, is to order the Men to repair to their Colours. To *beat the March*, is to command them to move. To *beat the Tat-too*, is to order all to retire to their Quarters. To *beat the Reveille*, at Break of Day, is to warn the Soldiers to rise, and the Centinels to forbear Challenging, and to give Leave to come out of Quarters. To *beat a Charge*, is a Signal to fall upon the the Enemy. To *beat a Retreat*, is a Signal to draw off from the Enemy. To *beat to Arms*, is for Soldiers that are dispers'd to repair to them. To *beat a Call*, is to advertise the Soldiers to stand to their Arms. To *beat an Alarm*, is to give Notice of sudden Danger, that all may be in Readiness. To *beat a Parley*, or *Chamade*, is a Signal to demand some Conference with the Enemy. When a Battalion is drawn up, the Drums are on the Flanks; and when it marches by Divisions, or Subdivisions, they march between them.

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Duty. The Exercise of those Functions that belong to a Soldier; yet with this nice Distinction however, that *Duty* is counted the Mounting Guard, and

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the like, where there is not an Enemy directly to be engaged; for when they march to meet the Enemy, it is call'd *Going upon Service*.

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EARTH Bags. Vide *Canvas Bags*.

Echarpe. To batter *en Echarpe*, is to batter obliquely, or sideways. Vide *Battery*.

Echaugette. Vide *Gueritte*.

Elder Battalion, or Officer. A Battalion is counted elder than another by the Time since it was raised. See more of this under the Word *Seniority*.

Embrazures. The Gaps, Cuts, or Loop-holes, left open in a Parapet for the Cannon to fire thro'. The usual Distance between the Embrazures is generally 12 Feet, for the Convenience of the Gunners, and that the Parapet may not be too much weaken'd. Every Embrazure is three Feet above the Platform next to the Cannon, and a Foot and a half next the Campaign, to sink the Muzzle, and play low. Each of them is about three Feet wide within, and about six or seven without, for the Convenience of traversing the Guns. See *Battery*.

Eminence, or Height. A rising Ground that overlooks, and commands that under it.

Empattemment. The same as *Talus*, which see.

Encinte. The Wall or Rampart which surrounds a Place; sometimes composed of Bastions

and Curtins, either faced with Brick or Stone, or only made of Earth; sometimes only flank'd by round or square Towers, which is called a *Roman Wall*.

Enfans perdus. Men detach'd from several Regiments, or otherwise appointed to give the first Onset in Battle, or an Attack upon the Counterscarp, or the Breach of a Place besieg'd; so call'd because of the imminent Danger they are expos'd to. In *England* they are commonly call'd, *The Forlorn Hope*.

Enfilade. The Situation of a Post, which can discover and scour all the Length of a strait Line, which, by that Means, is rendered almost defenceless.

To Enfile, or Enfilade the Curtin or Rampart. To sweep the whole Length of it with the Shot. In conducting the Approaches of a Siege, Care must be taken that they be not enfilad'd from the Works of the Place; but that they be carried on with Windings and Turnings up to the Glacis, and then strait forwards, being sunk deep in the Ground, and covered over Head.

Enneagon. A Figure that has nine Sides, and as many Angles, capable of being fortified with the same Number of Bastions.

Ensign. The Officer that carries

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carries the Colours among the Foot, and is the lowest Commission Officer in the Company, being subordinate to the Captain and Lieutenant. He has the Charge of the Ensign in Battle, and is to die rather than lose his Colours. If he be kill'd, the Captain is to take them in his Stead.

Envelope. A Work of Earth rais'd sometimes in the Ditch of a Place, sometimes beyond the Ditch: Sometimes like a plain Parapet, and sometimes like a small Rampart with a Parapet to it. *Envelopes* are generally made, when weak Places are covered only with bare Lines, and either they cannot, or will not stretch out towards the Campaign with Half Moons, Hornworks, Tenailles, or the like Works which require much Ground. The *Envelopes* in a Ditch are sometimes call'd *Sillons*, *Contre Gardes*, *Conservees*, or *Lunettes*. See *Sillon*, *Contre Garde*, *Lunettes*.

Epaule, or Shoulder of a Bastion. The Space contained by the Angle, made by the Union of the Face and Flank; whence that Angle is call'd, *The Angle of the Epaule*, or *Shoulder*.

Epaulment. A Work to cover aside, or Side-ways, made either of Earth thrown up, of Bags of Earth, of Gabions, or of Fascines and Earth. The *Epaulments* of the Places of Arms for the Cavalry, behind the Trenches, are generally only of Fascines and Earth.

Epaulment, is also taken for a *Demi Bastion*. Vide *Bastion*.

Epaulment, or *Square Orillon*.

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A Mass of Earth almost square, and faced or lined with a Wall, to cover the Cannon of a *Cazematte*. Vide *Orillon*.

Eptagon. See *Heptagon*.

Equilateral. A Figure that has all its Sides equal.

Escalade. Vide *Scalade*.

Escarp. Vide *Scarp*.

Escouade. Generally is the third Part of a Company of Foot, so divided for mounting of Guards, and relieving one another: Equivalent to a Brigade of Horse.

Esplanade. It properly signifies the Sloping of the Parapet of the Covert Way towards the Campaign, and is therefore the same as the Glacis of the Counterescarp; but begins to be antiquated in that Sense, and is now only taken for the empty Space between the Glacis of a Citadel, and the first Houses of a Town.

Etoile. Vide *Star Redoubt*.

Etappe. An Allowance of Provisions and Forage, for Soldiers in their March through a Kingdom, to or from Winter Quarters.

Etappier. One that contracts with a Country, or Territory, for furnishing Troops in their March with Provisions, and Forage. The *Etappiers* are to deliver the *Etappe* to the Majors of Horse, or Foot, and in their Absence to the Quarter Masters of each Troop of Horse, or Sergeants of the Company of Foot. They are forbid giving Soldiers their *Etappe* in Money. Sometimes the *Etappiers* and

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Officers compound for a Sum of Money, and oblige the Soldiers to make two Days March in one; which is great harrassing of Men and Horses, and a notorious Fraud.

Evolutions. The Motions made by a Body of Men in changing their Posture, or Form of drawing up, to make good the Ground or Post they are on, or possess themselves of another, that they may either attack the

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Enemy, or receive his Onset more advantageously. The *Evolutions* are *Doubling of Ranks* or *Files*, *Counter Marches*, and *Wheelings*.

Exagon. See *Hexagon*.

Exercise. The Practice of all those Motions and Actions, and the whole Management of Arms a Soldier is to be perfect in, to be fit for Service, and make him understand how to attack and defend.

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FACE of a *Bastion*. The two foremost sides, reaching from the Flanks to the Point of the Bastion where they meet, are call'd the *Faces*. These are commonly the first undermin'd, because they reach furthest out, and are least flank'd, and therefore weakest. But even before this can be done, the opposite Flank, which defends the Passage of the Moat, should be ruin'd.

Face of a *Place*, call'd also the *Tenaille* of the *Place*. The Interval between the Points of two neighbouring Bastions, containing the Curtin, the two Flanks, and the two Faces of the Bastions that look upon one another. In a Siege, when the whole *Tenaille* is attacked, the Approaches are carried on against both Bastions.

Face *prolong'd*, or *extended*. Is that Part of the Line of Defence razant, which is terminated by the Curtin, and the Angle of the Shoulder; that is, it is the Line of Defence razant,

diminished by the Face of the Bastion.

Face of a *Gun*, is the Superficies of the Metal at the Extremity of the Muzzle of the Piece.

Face is a Word that respects also the Motions of Troops. To *Face*, is to look towards such a Side, or to turn to it; as, *Face* to the *Right*, or to the *Left*, is, to turn the Face and whole Body one Quarter that Way, upon the opposite Heel.

Faggots. The French call them *Passevohans*. They are Men hired to muster, by Officers whose Companies are not full, to cheat the Sovereign of so many Men's Pay. The late King of France order'd, that any who should be found so to pass in Musters, if discover'd, should have a *Flower de Luce* burnt upon their Cheek, and lose their Arms and Equipage. *Faggots* are also the same as *Fascines*.

False Attack. Vide *Attack*.

Falcon. Vide *Falcon*.

Falconet.

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Falconet. Vide *Fauconet*.

Falſe Alarm. Vide *Alarm*.

Fanion. A Banner carried by a Servant belonging to each Brigade of Horſe and Foot, at the Head of the Baggage of each Brigade, to keep good Order, and prevent Confuſion in the March. It is made of Stuff of the Colour of the Brigadiers, or the Commanding Officer's Livery. It is a Corruption of *Gonfannon*, which in *Italian* ſignifies a Banner.

Faſcines, are Faggots of ſmall Wood, which diſtinguiſhes them from the *Sauciſſons*, made of bigger Branches of Trees. *Faſcines* are greater or leſs, according to the ſeveral Uſes they are put to. Thoſe that are to be pitch'd, to burn a Lodgment, Gallery, or other Work of the Enemies, are but a Foot and a half long, and a Foot thick; but thoſe that are for making *Epaulments*, or *Chandeliers*, or to raiſe Works, or to fill up wet Ditches, muſt be between two and three Feet in Thickneſs, and four Feet long; and being to be loaded with much Earth to make them more ſolid, and prevent their being fired, they are bound at both Ends, as well as in the Middle. The Enemy has no Way to deſtroy them but by Fire; to prevent which, they are either loaded with Earth, as has been ſaid, or cover'd with raw Hides.

A Faucon, or *Falcon*. A very ſmall Cannon 2 Inches and 6 Eighths Diameter in the Bore, 7 Feet long, weighing 750 lb; takes a Charge of 2 Pounds 4

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Ounces of Powder, and carries a Ball 2 Inches and 5 Eighths Diameter, and 2 Pounds 8 Ounces Weight. Its point blank Shot is 100 Paces.

A Fauconet, or *Falconet*. A very ſmall Piece of Cannon, 2 Inches and 2 Eighths Diameter in the Bore, 6 Foot long, weighing 400 Weight, takes a Charge of 1 Pound 4 Ounces of Powder, and carries a Bullet 2 Inches and 1 Eighth Diameter, and 1 Pound 5 Ounces Weight. Its point blank Shot 90 Paces. Theſe Pieces are now pretty much out of uſe, being found too ſmall to be of conſiderable Advantage in an Army, where the three Pounders, Minions, and Sakers, are generally the ſmalleſt now to be met with.

Fauſſe Braye, *Chemin des Rondes*, *Baſſe Enceinte*, or *Lower Encloſure*. This is a Space about the Breadth of two or three Fathom round the Foot of the Rampart, on the Outſide, defended by a Parapet, with a Banquet, which parts it from the *Berme*, or *Foreland*, and the Edge of the Ditch. The Deſign of the *Fauſſe Braye*, is to defend the Moat: But they are uſeleſs where Ramparts are faced or lined with Wall, becauſe of the Rubbiſh the Cannon beats down into them. Therefore moſt Engineers will have none before the Faces of the Baſtion, where the Breach is commonly made, becauſe the Ruins falling, the *Fauſſe Braye* makes the Aſcent to the Breach the eaſier, and what flies from the Faces, kills the

the Soldiers that are to defend them. Traverses, Sillons, or Coffers, are much better Works for the same Purpose of defending the Ditch.

Fichant. Vide *Line of Defence Fichant*.

Field Officers. See *Officer*.

Field Pieces. Small Guns, proper to be carried along with an Army into the Field; such as 3 Pounders, Minions, Sakers, 6 Pounders, Demiculverins, and 12 Pounders; which, because of their Smallness, are easier drawn, easier serv'd, require lesser Quantities of Ammunition, and are, upon the whole, of less Charge.

Field Staff. A Weapon carried by the Gunners, about the Length of a Halbert, with a Spear at the End, having on each Side Ears screw'd on, like the Cock of a Matchlock, where the Gunners screw in lighted Matches when they are upon Command; And then the *Field Staffs* are said to be arm'd.

Field Marshal. A Rank not of long standing in *England*, but superior to all others in the Military Way. There never have been above two or three Field Marshals in *England* at once; but the Marshals of *France* are commonly pretty numerous.

File. The strait Line Soldiers make, that stand one before another, which is the Depth of the Battalion, or Squadron, and thus distinguish'd from the Rank where the Men stand Side by Side, and make the Length of the Battalion, or Squadron. Among the Foot, the Files are

generally six deep; among the Horse, but three. The Files must be strait, and parallel to one another. To *double the Files*, is to put two Files into one, which makes the Depth of the Battalion double what it was; not in the Space of Ground, but in Number of Men; and also doubles the Intervals between the Files, making the Ranks look thin. The Men in a File are distinguish'd by the several Names of File Leaders, Half File Leaders, and Bringers up. If a Battalion be drawn up eight deep, there may be Quarter Files; but this is not usual.

File Leaders. The Men that compose the Front, or first Rank of a Battalion, being the first of every File.

To file off. The same as to *desfile*, to fall off from marching in a spacious Front, and march in Length by Files. When a Regiment is marching in full Front, and comes to a narrow Pass, it may march off by Divisions, or Subdivisions, or file off from the Right, or Left, or as the Ground requires.

Fire. To fire: To discharge Fire Arms.

Fire Arms. Under this Name are comprehended all Sorts of Arms, that are charg'd with Powder and Ball, as Cannon, Muskets, Carabines, Pistols, Blunderbusses, &c.

Running Fire. When Men drawn up for that Purpose fire one after another, so that it runs the whole Length of the Line, or round a Town, or the like, which

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which is used upon publick Occasions of Rejoicing.

Fire Ball. Is made of ground or Meal Powder, Saltpetre, Brimstone, Camphire and Borace, all sprinkled with Oil, and moulded into a Mass, with Mutton Suet, and Pitch, and made as big as an ordinary Grenade. This is wrapp'd up in Towe, with a Sheet of strong Paper over it. To fire it, they make a Hole into it with a Bodkin, into which they put a Fusee of a Composition that will burn slow. This they cast into any Works of an Enemy, when they would discover them in the Night Time. They are also used to fire Houses, or Galleries; but are then arm'd with Iron Spikes, or Hooks, that they may hold fast where they fall.

Fire Master. An Officer that makes the Fusees for Bombs and Granadoes, and other Fireworks. He also gives the Directions, and proportions the Ingredients for all Compositions in Fireworks.

Firelock. The Arm carried by a Foot Soldier, 3 Foot 8 Inches in the Barrel, the Stock 4 Foot 8 Inches. It carries a Leaden Bullet of an Ounce Weight.

Fire Pots. Small Earthen Pots, into which is put a Grenade filled with Powder, and then the Pot is fill'd with fine Powder till the Grenade is cover'd: The Pot is afterwards covered with a Piece of Parchment, and two Matches lighted across. This Pot being thrown by a Handle of Match where it is design'd,

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it breaks and fires the Powder, and burns all that is near it, and likewise fires the Powder in the Grenade, which ought to have no Fusee, to the End its Operation may be quicker.

Fire-workers. Officers subordinate to the Fire Master, but who command the Bombardiers. They receive their Orders from the Fire Master, and not only see them executed, but work themselves along with the Bombardiers. There are Twenty four Fire-workers establish'd in the Office of Ordnance.

Flank. That Part of the Bastion which reaches from the Curtin to the Face, comprehended betwixt the Angle of the Curtin and the Angle of the Shoulder, and is the principal Defence of a Place: Its Use is to defend the Curtin, the Flank, and Face of the opposite Bastion; to defend the Passage of the Moat; batter the Saillant Angles of the Counterscarp and Glacis, from whence the Besieged generally ruin the Flanks with their Artillery; for the Flanks are the Parts of a Fortification, which the Besiegers endeavour most to ruin, in order to take away the Defence of the Face of the opposite Bastion.

Flank Oblique, or Second Flank. That Part of the Curtin that can see to scour the Face of the opposite Bastion, and is the Distance between the Lines *Raxant* and *Fichant*. This appears in a Plan upon Paper to be a good Defence, but is rejected by most Engineers, being liable

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to be ruined at the Beginning of a Siege, especially if it be of a sandy Earth. The second Parapet, which may be raised behind the former, is of no Use; for it neither discovers nor defends the Face of the opposite Bastion: Besides, it shortens the Flank, which is the true Defence, and the continual Fire of the Besiegers Cannon, will never suffer them to raise a second Parapet. This second Flank defends very obliquely the opposite Face, and is to be used only in a Place which is to be attacked by an Army without Cannon.

Flank retir'd, Low or cover'd Flank, Flank retiré. The Platform of the *Cazematte*, which lies hid in the Bastion. This is generally called the *Cazemate*, when there is only one Platform retir'd towards the Capital of the Bastion, and covered by an Orillon. These retir'd Flanks are a great Defence to the opposite Bastion, and to the Passage of the Moat, because the Besiegers cannot see, nor easily dismount their Guns.

Flank prolong'd, or extended. Is the stretching out of the Flank from the Angle of the *Epaule* to the exterior Side, when the Angle of the Flank is a right Angle.

Flanks of an Army, are the Troops encamp'd on the Right and Left. Flanks of a Battalion are the Files on the Right and Left.

To Flank. To discover and fire upon the Side or Flank of an Enemy. Any Fortification which

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has no Defence but right forwards, is faulty, and to make it compleat, one Part ought to flank the other. The Curtin is always the strongest Part of any fortify'd Place, because it is flank'd by the two Flanks at the Ends of it; and the Face, having but one Defence from the opposite Flank, is counted the weakest.

Flank'd Angle. The Angle form'd by the two Faces of the Bastion; the Point of the Bastion. See *Angle*.

Flask. A Thing generally made of Horn, to carry Powder in, with the Measure of the Charge of the Piece on the Top of it.

Flying Army, or Flying Camp. See *Camp*.

Flying Bridge. See *Bridge*.

Foot. So absolutely taken, signifies all those Bodies of Men that serve on Foot. They are arm'd with a Sword, Bayonet, Firelock, or Pike, Collar of Bandleers, or Cartridge Box, &c. The Foot are form'd into Companies, and according to the Articles of War, a Soldier is not to leave his Company, without Leave from his Officer, or to go about his own Business, without being reputed a Deserter, and tried for his Life. These Companies are form'd into Regiments.

Foot. Is a known Measure divided into twelve Inches, being the 6th Part of a Fathom, the 5th of a Geometrical Pace, and used in Fortification.

'To be on the same Foot with another', is to be under the same Cir-

Circumstances in point of Service; to have the same Number of Men, and the same Pay.

'To gain or lose Ground Foot by Foot, is to do it regularly and resolutely, defending every Thing to the utmost, or forcing it by Dint of Art or Labour.

Footbank, Footstep, or Banquette. A small Step of Earth under the Parapet, to raise the Men to fire over it, about a Foot and a half high, and three Feet wide. They usually make two or three of them under the Parapets of little Forts and Redoubts. The Parapet should be always four Foot and a half above the highest Footbank.

Foreland, Berm, or Lizier; Relais, Retraite, and Pas de Souris. A small Space of Ground between the Rampart of a Place, and the Moat, which the best Fortifications have not, because it is advantageous for the Enemy to come over the Moat, and get Footing; and therefore this is only left, where there is not enough to defray the Expence of Stone to face the Foot of the Rampart, in place whereof this helps to support it, and is generally from 3 to 8, or 10 Feet wide. This Space is left to receive what the Enemy batters down from the Parapet, that it may not fill the Ditch. For the more Security this *Foreland* is generally pallisadoed.

Forage. Hay, Straw, and Oats, for the Subsistence of Horses. A Ration of Forage is a Day's Allowance for a Horse, which is 20 lb. of Hay, 10 lb.

of Straw, and, for Want of Straw, 25 lb. of Hay.

The Forlorn Hope. Vide *Enfans perdus*.

Forge. An Engine carried along with the Artillery for the Smiths, and is a travelling Smith's Forge. The *Forge* for hot Balls, is the Place where the Balls are made hot before they are fired off: It is built of Brick, and hath a Furnace below, over which are Bars of Iron: It is cover'd over Head, and the Balls laid upon the Bars till they be hot, and are taken out with long Ladles, to be put into the Gun. The Materials for such Forges are carried along with the Artillery, when there is any Design of burning Magazines, or the like, with hot Ball.

Formers, are of several Sorts; but the chief is for making Cartridges for Cannon. They are round Pieces of Wood fitted to the Diameter of the Bore of a Gun, on which the Paper, Parchment, or Cotton, which is to make the Cartridge, is roll'd before it be sewed.

Fort, is a Work environ'd on all Sides with a Moat, Rampart, and Parapet: The Design of it is to secure some high Ground, or the Passage of a River, to make good an advantageous Post, to fortify the Lines and Quarters of a Siege, &c. They are of different Figures, and are made smaller and greater, as the Ground requires. Some are in the Shape of Bastions; some are fortify'd with entire Bastions, others with De-

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mi Bastions; some are raised on a Square, and others on a Pentagon. A Fort differs from a Citadel, because this last is always rais'd by the Orders of the Sovereign. Small Forts are made in form of a Star, having five or seven Angles, and are rais'd for the Security of the Lines of Circumvallation.

Fortification. The Art of fortifying a Place, so that every Part may discover the Enemy in Front and Flank, and oppose the Depth of the Ditch, and the Height and Thickness of the Rampart against him; that so a small Body of Men within that *Enclosure* may advantageously oppose a great Army. This same Word is also us'd to signify all the Works that cover or defend a strong Place. It is also the Art by which an Engineer makes Plans and Designs, raises different Sorts of Works, digs the Foss, faces the Ramparts, and conducts the Approaches, either in the Attack or Defence of a Place: In short, it requires an Engineer to be a good Designer, Architect, Miner, and Mechanick, and to understand Gunnery.

Fortification Offensive, teaches a General how to take all Advantages for his Troops; the Manner of encamping, and of besieging and taking of Towns.

Fortification Defensive, shews a Governor how to make the best of the Garrison committed to his Care, and to provide all Things necessary for its Defence.

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Natural Fortification, consists in the natural Difficulty of Access to any Place, caus'd by Waters, Morasses, craggy or steep Ascents, or the like, and teaches an Engineer how to make the most of them.

Artificial Fortification, is what an Engineer thinks fit to add in Works, as Ramparts, Trenches, Bastions, Ravelins, Half Moons, &c. to supply the Defects of Nature, and secure a Place against an Enemy.

Ancient Fortification, consists only in Places surrounded with Walls, and Towers on them at certain Distances.

Modern Fortification, is that which is flank'd and defended by Bastions and Outworks, and whose Works are so solid, that they are Proof against the Force of Cannon, and cannot be beat down, but by a perpetual Fire from several Batteries of Cannon.

Fortification Regular, consists in the Place's being fortify'd according to the Rules; the Sides of the Polygon not exceeding a Musket Shot, and the Angles being equal; in its being defended by Bastions and other Works, whose relative Parts are equal and uniform.

Irregular Fortification is, when a Town has such an irregular Situation, as renders it incapable of being regularly fortify'd, both because of the Difference of its Sides, some being too long, others too short; as likewise because of its being surrounded with Precipices, Vallies, Ditches, Rivers, Hills,

Hills, Rocks, or Mountains, and must therefore be fortify'd with Works suitable to the Situation.

To fortify inwards, is to represent the Bastion within the Polygon propos'd to be fortify'd; and then that Polygon is called the *Exterior Polygon*, and each of its Sides the *Exterior Side* terminating at the Points of the two nearest Bastions.

To fortify outwards, is to represent the Bastion without the Polygon propos'd to be fortify'd; and then that Polygon is call'd the *Interior Polygon*, and each of its Sides the *Interior Side*, terminating in the Centers of the two nearest Bastions.

Fortin. A small Fort made like a Star, of five or more Points, to strengthen a Line of Circumvallation, or the like.

Fosse. Vide *Moat*.

Foucade, Fougado, or Fougasse. A small *Fourneau*, or Mine made like a Well; eight or ten Feet wide, and ten or twelve in Depth, charg'd with Barrels or Bags of Powder, and prepar'd under a Post that is like to be lost. It is covered with Wood and Earth, and Fire put to it by a Saucifs Train convey'd in a Pipe to another Post. Military Persons say, 'We cou'd not keep our Footing on the Half Moon we had gain'd, because the Enemy play'd two *Fougades*, which ruin'd the Lodgment we had made upon the Gorge'.

Fourneau. The Chamber of

a Mine, being a Hollow made under some Work that is to be blown up. The Top of it is sometimes made like a Priest's Cap; that is, with four or five Hollows, or Chimneys in it, that the Powder may find the more Passages, and have the Effects different Ways. Sometimes the Chamber is 5 or 6 Feet every Way, being exactly square, which is most usual. About 1000 Weight of Powder, either in Bags or Barrels, is the common Charge of one of these Chambers: But it is at the Discretion of the Engineer to add or diminish this Proportion, according to the Bulk or Nature of the Soil he is to blow up, whether loose Earth, or Rock. For sometimes they make four or five Chambers under one Work, each of which has not above 100 Weight of Powder. A *Fourneau* ought not to be charged till it is ready to spring, because the Powder lying too long in the Humidity of the Earth, loses its Force. When the Powder is put in Barrels, one of the Staves must be taken out, and a Quantity of Powder scattered round; if it be in Sacks, they must be ripped, and Powder strow'd about, that they may fire all at once. The Mouth of the *Fourneau* is to be stopp'd with great Planks, and Pieces of Wood, and the Vacancy which is left, after the *Fourneau* is charged, must be filled with Stones and Pieces of Wood, and all the Turnings well stopp'd.

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Fourneau superficial. Vide *Caisson*.

Fraises. Stakes about six or seven Feet long, whereof about one third Part is drove into the Wall of a fortified Place, a little below the Cordon of the Wall. In such Places as are not faced or lined with Wall, they are planted on the Outside of the Rampart, about the Foot of the Parapet. They are always stuck in sloping a little, that is, not quite parallel to the Level of the Plain, but the Points hanging downwards, that Men may not stand upon them. They serve to prevent Scalades and Desertion.

To Fraize a Battalion. Is so to line it every Way with Pikes, or Bayonets, that it may stand the Shock of a Body of Horse.

Front of a Battalion, is the first Rank, or the File Leaders: It is likewise called the *Face* or *Head of a Battalion.* *Front of a Squadron* is the first Rank of Troopers. *Front of an Army* is the first Row of Tents in the first Line, which are the Quarter

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Masters Tents in the Horse, and the Sergeants in the Foot.

Front of a Place, is the same as the *Face of a Place,* or the *Tenaille,* being all that is contained between the *flanked Angles* of two neighbouring *Bastions,* viz. the two *Faces,* the two *Flanks,* and the *Curtin.*

To Front every Way, is when the Men are faced to all Sides.

Furlough. A Licence granted by an Officer to a Soldier, to be absent for a Time from his Duty. All Soldiers found half a League from a Garrison, or Army, going to an Enemy's Country, or Quarter, without a Pass, are deemed, and treated as Deserters.

A Fuse, Fusée. A Pipe full of Wildfire put into the Touch-hole of a Bomb, Granado, or the like, to fire it.

Fuziliers. Foot Soldiers armed with Firelocks, which are generally slung. There is a Regiment of *Welsh Fuziliers,* and another of *Scotch,* in the *English Service.*

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GABIONS, or *Cannon Baskets.* Great Baskets 5 or 6 Feet high, and about 4 Feet Diameter, as well at the Bottom as the Top. They are filled with Earth to make a Cover or Parapet against the Enemy, and are sometimes used in making Batteries. They are brought empty to the Place, and placed

three a-breast, which makes the Distance between the Embrazures. Two are placed behind these, so as to cover the Joinings of the first three; and one behind the two, which makes the Embrazure wide enough at the Outside, these six Gabions being the Merlon. The Pioneers, or Soldiers employed for that Use, fill

fill them with Earth; but they are never so good as a Battery raised of Earth or Fascines, because, if there be a Counter Battery to play upon them, they are easily ruined. Sometimes they are used in making Lodgments on a Post, and sometimes in making the Parapet of the Approaches, especially when the Attack is carrying on through a rocky Ground. When the Approaches are got near the Covert Way, the Besieged endeavour to set the Gabions on fire by small *Fascines*, or Ravins pitched over, which they throw upon them.

Gallery, or Passage made cross a Moat, is a Walk of strong Beams, cover'd overhead with Planks, and loaded with Earth. 'Twas formerly us'd for putting the Miner to the Foot of the Rampart. Sometimes the Gallery is cover'd over with raw Hides, to defend it from the artificial Fire of the Besieged. It ought to be 8 Foot high, and 10 or 12 wide: The Beams ought to be half a Foot thick, and 2 or 3 Feet asunder; the Planks or Boards nailed on each Side, and filled with Earth or Planks in the Middle; the Covering to rise with a Ridge, that what is thrown upon it by the Besiegers to burn it, may roll off.

Gallery of a Mine, is the same as *Branch of a Mine*, that is, a Passage under Ground of 3 or 4 Feet wide under the Works, where a Mine or Countermine is carried on. The Besieged

and Besiegers carry each of them Branches under Ground, in search of each others Mines, which often meet and destroy one another, or at least disappoint the Effect of the Mine. See *Mine*.

Garrison Town, is a strong Place, in which Troops are quartered, and do Duty for the Security of the Town; keeping Guards at each Port, and a Main Guard in the Market-place. The Troops that are put into a Town, either for their Security or Subsistence, in the Winter-time, or are there in the Summer for the Defence of the Place, are called *the Garrison of that Town*.

Gate. Made of strong Planks with Iron Bars to oppose an Enemy. The Gate of a strong Hold ought to be in the Middle of a Curtin, that it may be well defended by both Flanks. Those which are in the Flank, weaken the most necessary Part of the Fortification; and when they are in the Face, they are still more prejudicial to the Bastion, which ought to be clear, to make Retrenchments upon Occasions. At the Opening of the Gates, a Party of Horse is sent to patrol in the Country round the Place, to discover Ambuscades or lurking Parties of the Enemy, and to see if the Country be clear. In some Garrisons the Guard mounts at the Opening of the Gate, so that in case of a Surprise, both the old and new Guards being under Arms, they are in a Condition of making a good

good Defence. The Word nor Orders ought never to be given till after the Gates are shut, for fear of Spies lurking in the Town, that may carry Intelligence to the Enemy.

Gazons. Sods of Turfs about a Foot long, and half a Foot broad, cut in Form of a Wedge, to face the Parapet. They are made so, that their Solidity forms a Triangle, that being mix'd with the rest of the Earth of the Rampart, they may easily incorporate in a Mass. The first Bed of Gazons is fixed with Pegs of Wood; the second Bed ought to be laid to bind the former, that is over the Joints of it, and so continued till the Ramparts be finished. Betwixt these Beds they generally sow all sorts of binding Herbs, to strengthen the Rampart. Traverses made to pass a Ditch are often cover'd with Gazons, laid on Planks to save them from Fire.

Gendarmes, or Men at Arms. Horsemen who formerly fought in compleat Armour; now a select Body of Horse in France, being in all nine Independant Troops, not regimented. These Troops are commanded by Captain Lieutenants, the King and Princes of the Blood being their Captains; the King's Troop, besides a Captain Lieutenant, has two Sub Lieutenants, three Ensigns, and three Guidons. The other Troops, which are those of the *Scotch Gendarmes*, the *Queen's*, the *Dauphin's*, the *Gendarmes of Anjou*, *Burgundy*, the *English*

and *Flemish Gendarmes*, and those of the Duke of Orleans, are called the *Small Gendarmery*, and have each a Captain Lieutenant, Sub Lieutenant, Ensign, Guidon, and Quarter Master. They carry a Standard longer than the Light Horse, and divided into two Points a little rounded, generally adorn'd with some little Device or Cypher in Embroidery, and a Fringe. Each Troop has a Pair of Kettle Drums, and two Trumpets. The Troops of Life Guards, those of the Musquetaires, and those of the Light Horse of the Queen, Dauphin, and Duke of Orleans, are reckon'd as *Gendarmes*, and take place as such.

General of an Army. He that commands it in Chief; who, to be fit for so great an Employ, ought to have excellent Conduct; should be well skill'd in the Art of attacking strong Places, and know how to encamp so advantageously, that it may be in his Choice whether he will fight or not. The Functions of a General are, to regulate the March of the Army, and their Encampment, to visit the Posts, to command Parties for Intelligence, to give out the Orders and the Word every Night to the Lieutenant and Major Generals: In Day of Battle, he chuses the most advantageous Ground; makes the Disposition of his Army, posts the Artillery, and sends his Orders by his Aid de Camps, where there is Occasion. At a Siege, he causes the Place to be invested; he views and observes it,

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it, orders the making of the Lines of Circumvallation and Contravallation, and making the Attacks: He visits often the Works, and makes Detachments to secure his Convoys. There are also Lieutenant Generals, Brigadier Generals, Commissary Generals, and Quarter-master Generals, of which we shall speak under their particular Letters.

General of Horse, and General of Foot, are Posts next under the General of the Army. They have an absolute Command over all the Horse or Foot of an Army, upon all Occasions, above the Lieutenant Generals.

General of the Artillery, or Master General of the Ordnance, is one of the greatest Employes in the Kingdom, being a Charge of extensive Trust. It is generally bestowed on one of the first Peers of the Kingdom: He has the Management of all the Ordnance of the State, and ought to know and consider whatever can be servicable or useful in the Artillery, and to distribute the Vacancies to such as are qualified for them. He has for his Assistants in that Employ, a Lieutenant General, who commands in the Absence of the General; a Surveyor General, Clerk, Store Keeper, and Clerk of Deliveries, who are called the Principal Officers of the Ordnance.

General. The Beat of Drum so call'd, is the first which gives Notice, commonly in the Morn-

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ing early, for the Foot to be in a Readiness to march.

General Officers. Vide Officer.

Gin, or Crab. An Engine for lifting or raising of great Guns upon, or off their Carriages.

To give Ground. To retire, to lose the Post a Body of Men is in.

Glacis. This Word in general signifies a very easy little Slope, which distinguishes it from the Talus. For in the Glacis the Height is always less than the Base of the Slope; but in the Talus the Height is equal to, or more than the Base of the Slope. The Name of Glacis is particularly applied to the Slope of the Parapet of the Covert Way, which falls off even with the Level of the Field. This Glacis is also call'd *Esplanade*; but that Word in this Sense grows out of Date. The Soldiers corruptly call the Top of the Glacis the Counterscarp. When the Approaches are brought to the Foot of the Glacis, they are so near, that they cannot turn any Way, but they must be enfiladed; therefore they are carried strait forwards by Sap, unless it be resolved to attempt the Covert Way by Assault.

Gorge. The Entrance that leads into the Body of a Work. All Gorges must be plain, without any Parapet, lest when the Besiegers have possess'd themselves of the Work, that Parapet should

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should cover them from the Fire of the Place: But the Gorges are palisado'd to prevent Surprize; and during the Siege they generally make little Mines, Coffers, and Fourneaux under them, to blow up the Enemies before they can lodge themselves. The several Gorges are distinguish'd as follows.

Gorge of a Bastion, is that Space which is taken equally on each Side of the Angle of the Figure on the Sides of the interior Polygon, which makes the Entry into the Bastion from the Town or Place, one half of which is called the Demi Gorge.

Gorge of a flat Bastion, is a right Line, which terminates the Distance between two Flanks.

Gorge of a Half Moon, is a Distance between the two Flanks, taken on the Angle of the Counterscarp.

Gorge of a Ravelin, is the Distance between the two Sides or Faces towards the Place.

The Gorges of all other Outworks, are the Entry into them from the Place, the Distance between their Sides.

Governor of a Garrison. A considerable Officer, representing the King's Person, whose Authority extends not only over the Inhabitants and Garrison, but over all Troops that may be there in Winter Quarters, or Quarters of Refreshment. His Charge is to order the Guards, the Rounds, and the Patrouilles; to give every Night the Orders and the Word, after the Gates are shut; to visit the Posts; to

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see that both Officers and Soldiers do their Duties; to send frequently Parties abroad for Intelligence, and to raise Contributions.

Grenadier. A Foot Soldier, armed with a Sword, Firelock, Bayonet, and a Pouch to hold his Grenades. They are cloath'd differently from the rest of the Battalion, and wear high Caps. Each Regiment, of late Years, has a Company of Grenadiers, which takes always the Right of the Battalion. The Grenadiers are generally the tallest and briskest Fellows, and always the first upon Attacks: When there is any Appearance of Action, each Grenadier carries three Hand Grenades. Horse Grenadiers, called by the French *Grenadiers volans*, or *Flying Grenadiers*, are such as are mounted on Horseback, and fight on Foot; their Exercise is the same with the other Grenadiers. We have in England two Troops of Horse Grenadier Guards.

Grenadoes, Grenades. Small Shells, concave Globes, or hollow Balls, some made of Iron, some of Tin, others of Wood, and even of Pastboard; but most commonly of Iron, because the Splinters of it do most Execution. This Globe is fill'd with fine Powder, and into the Touch-hole of it is stuck a Fusee of Powder, beaten and temper'd with Charcoal Dust, that it may not flash, but burn gently 'till it comes to the Charge. These are thrown by Hand into Places where Men stand thick, and particularly

particularly into Trenches and Lodgements the Enemy makes, and do great Mischief.

Guard. The Duty perform'd by a Body of Men with Vigilance, to secure all against the Attempts and Surprizes of an Enemy. 'To be upon Guard', 'To mount the Guard', 'To relieve the Guard', 'The Officer of the Guard', 'The Serjeant of the Guard', are Phrases respecting the Guard, and all intelligible. In Time of Danger all Guards are drawn by Lot, to prevent any treacherous Officers having the Opportunity of betraying a Post to the Enemy. Troops in Garrison generally mount the Guard every third Night, and have two Nights to rest.

Main Guard, is that from whence all the other small Guards are detach'd. Those who are to mount the Guard, meet at the respective Captain's Quarters, and are carried from thence to the Parade; where, after the whole Guard is drawn up, the small Guards are detach'd for the Ports and Magazines, and the subaltern Officers throw Lots for their Guards, and are subordinate to the Captain of the Main Guard. The Guards are mounted in Garrisons at different Hours, according as the Governor pleases; but the most usual Time is at the Opening of the Gates at ten a Clock, or at two in the Afternoon.

Advanc'd Guard, is the Party of either Horse or Foot that march before a Body, to give

them Notice if any Danger appears. When the Army is upon their March, the Grand Guards, who should mount that Day, serve as an Advance Guard to the Army. If a Body of Foot be marching, their Advance Guard are Foot. In small Parties, 6 or 8 Horse are sufficient, and they are not to go above 4 or 500 Yards before the Party. An Advanc'd Guard is likewise the small Body of 12 or 16 Horse, under a Corporal or Quarter Master, who are posted before the Grand Guard of the Camp.

Rear Guard, is that Part of the Army which brings up the Rear, which is generally the old Grand Guards of the Camp. The Rear Guard of a Party is 6 or 8 Horse, that march about 4 or 500 Paces behind the Party. The Advanc'd Guard going out upon Party, make the Rear Guard in their Return.

Grand Guard, are 3 or four Squadrons of Horse, commanded by a Field Officer, posted before the Camp on the Right and Left Wing towards the Enemy, for the Security of the Camp. This Guard mounts every Morning about seven or eight a Clock. See *Camp*.

Picket, or Piquet Guard. A certain Number of Horse and Foot, who are to keep themselves in a Readiness, in case of an Alarm: The Horse keep their Horses saddled, and are booted all the Time, in order to mount in a Minute. The Foot draw up at the Head of the Battalion, at the

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heating of the Tattoo; but return to their Tents, where they hold themselves in a Readiness to march upon any sudden Alarm. This forms a good Body, able to make a Resistance, till the Army can be in a Readiness.

Forrage Guard. A Detachment sent out to secure the Forragers, and are posted at all Places, where either the Enemy's Parties may come to disturb the Forragers, or they may be dispersed too near the Enemy, and be taken. This is likewise called the *Covering Party*, and marches the Night before the Forraging, that they may be posted in the Morning before the Forragers come. They consist both of Horse and Foot, and must stay at their Post, till the Forragers are all come off the Ground.

Artillery Guard, is a Detachment from the Army, to secure the Artillery. Their *Corps de Garde* is in the Front, and their Centries round the Park. This is a 48 Hours Guard, and upon a March they go in the Front and Rear of the Artillery, and must be sure to leave nothing behind. If a Gun or Waggon break down, the Captain is to leave a Part of his Guard to assist the Gunners and Matrosses in raising it again.

Corps de Garde, are Soldiers entrusted with the Guard of a Post, under the Command of one or more Officers.

Guards, Gardes du Corps. The Horse Guards are Gentle-

men chosen for their Bravery and Fidelity, to be entrusted with the Guard of the King's Person, divided, in *England*, into four Troops, call'd the Troops of Guards. Each Troop hath a Colonel, two Lieutenant-Colonels, a Cornet, a Guidon, four Exons, Brigadiers, and Sub-Brigadiers, and 160 private Men. The *Foot Guards* are Regiments of Foot appointed for the Guards of his Majesty, and his Palace: There are three Regiments of them, call'd the First and Second Regiments of Guards, the one having three Battalions, and the other two; and the Regiment of *Scots Guards* having likewise two Battalions.

Gueritte. A Centinel's Box, being a little Tower made either of Stone, Brick, or Wood, to preserve the Centinel from the Weather. Some call them *Echaugettes*. They are generally plac'd on the Points of Bastions, and Angles of the *Epaule*, and sometimes in the Middle of a Curtin, and are to hang a little over the Wall, that the Centinel may look down to the Foot of the Ramparts, and into the Foss, to prevent Surprize.

Guides. Captain of the Guides is an Officer appointed for providing Guides for the Army, of which he ought to have always a sufficient Number with him, who know the Country, to send out as Occasion requires. Such as are to guide the Army on a March, for Convoys, Parties, Baggage, Artillery, and Detachments; to provide which he

he ought to have a Party of Horse to go to the adjacent Villages, Castles, or Forts, to demand Boors, whom he brings to his Quarters, and keeps under a Guard, lest they should escape, till the Army come to another Ground, where he can be provided with others: He ought

to understand severall Languages, especially that of the Country in which the Army is.

Guidon. A French Term for him that carries the Standard in the Guards, or *Gens d'Armes*, and signifies likewise the Standard itself. It is now become common in England.

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Half Files. The three foremost Men in the Field, when a Battalion is drawn up, are called the *Front Half Files*, and the three hindmost Men the *Rear Half Files*.

Half Moon. An Outwork consisting of two Faces, which makes an *Angle Saillant*, the Gorge whereof bends in like a Bow, or Crescent, and were formerly us'd to cover the Point of a Bastion, which distinguishes them from *Ravelins*, always plac'd before the Curtin; but they have been found defective and useless, as being ill flank'd. At present only Engineers distinguish between *Ravelins* and *Half Moons*; for the Soldiers, and other Persons, call them all indifferently *Half Moons*, tho' improperly. Custom, however, prevails, especially because the Difference is rather in the Situation, than in the Thing itself. Vide *Ravelin*.

To Halt. Is to discontinue the March of Troops, to stand still, to stop in order to rest, or on any other Account whatsoever; and so the Word of Command

for Men to stop when they are marching, is *Halt*.

Head of the Camp. The Ground before the Camp, where is the *Bivouac*, or on which the Army draws out.

Head of a Work. Its Front next the Enemy, and farthest from the Place; as the Front of a Horn-work is the Distance between the flank'd Angles of the Demi-Bastions. The Head of a double Tenaille is the *Saillant Angle* in the Middle and the two other Sides, which form the *Re-entrant Angle*.

Hendecagon. A Figure that has eleven Sides, and as many Angles, capable of being fortified with the like Number of Bastions.

Heptagon. A Figure that has seven Sides, and as many Angles, each capable of a regular Bastion.

Herrison. A Barrier made of one strong Beam or Plank of Wood, full of Iron Spikes. It is supported in the Middle, and turns upon a Pivot or Axis. It is used in stopping a Passage like a Turn-Style; for it is equally

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ballanc'd upon the Pivot, standing upright in the Middle of the Passage, upon which it turns round, as there is Occasion to open or shut the Passage.

Herfes, or Portcullices. Strong Pieces of Wood jointed cross-ways, like a Lattice or Harrow. They used formerly to hang in the Middle of a Gateway of fortify'd Towns, to be let fall to stop the Passage, in case the Gate had been broke down, or retarded. It is either a Stop or a Separation, if any of the Enemy have already entred; for before it can be broke open, the Besieged have Time to rally, and repulse them. See *Orgues*.

Herse, is likewise an Engine like a Harrow, full of Iron Spikes; and used instead of the *Chevaux de Frise*, to throw in the Ways where Horse or Foot are to pass, to hinder their March, and upon Breaches to stop the Foot. Common Harrows are sometimes made use of in case of Haste, and are turn'd with their Points upwards.

Herfillon, is for the same Use as the *Herse*, and is made of one strong Plank of Wood, about ten or twelve Foot long, stuck full of Points or Spikes on both Sides.

Hexagon, is a Figure of six Sides, capable of being fortify'd with six Bastions.

Hobits. A Sort of small Mortars, about 8 Inches Diameter, some 7, some 6. They differ nothing from a Mortar, but in their Carriage, which is made after the Fashion of a Gun-

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Carriage, but much shorter. They march with the Guns, and are very good for incommoding an Enemy at a Distance, with small Bombs, which they throw two or three Miies; or in keeping a Pass, being loaded with Cartouches.

Hogshoads, or Barrels. Fill'd with Earth they serve to make Parapets to cover the Men, instead of Gabions and Earthbags.

Hollow Square. Vide *Square*.

Honey Comb in Cannon. Flaws in the Metal, a Fault in casting, and dangerous in firing.

Horizontal Superficies. The plain Field lying upon a Level, without any rising or falling.

Horn-work. In *French*, *Ouvrage a Corne*. Is an Outwork which the *French* Engineers prefer before *Tenailles*, *Swallow Tails*, or *Priest Bonnets*, because it takes in a great deal of Ground, and has a better Defence. It is composed of two long Sides or Faces parallel, the Distance between them being the Length of one Curtin: Their Length measuring from the Angle of the Shoulder, is the Length of one Side of the Polygon, or of the Curtin, and one Demi-Gorge. The Head or Front of this Work is fortify'd with two Demi-Bastions and a Curtin. They have sometimes Flanks on their long Sides, and then they are called Horn Works with double Flanks, or Shoulders. They have generally a Ravelin in their Gorge, and a small Ravelin before the Curtin.

Horse.

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Horse. Is taken for that Body of Men that serves on Horseback, whether Guards, Troopers, or Dragoons. So we say 'A Body of Horse', 'The Horse fought well', 'The Horse March. It is the same as Cavalry.

Horse de Frise. Vide *Chevreaux de Frise* and *Turnpikes*.

Horsehoe. A small round or oval Work, enclosed with a Parapet, rais'd in the Moat of a marshy Place, or in low Grounds, or else to cover a Gate, and keep a *Corps de Garde* to prevent Surprizes.

Hospital. A Place appointed for the sick and wounded Men, who have there a Number of Physicians, Surgeons, and Servants to attend them, and cure them.

Hurdles. See *Clayes*.

Hussars. Hungarian Horsemen, of whom we have heard much since the Beginning of the present Wars in Germany. Their Habit is a furr'd Bonnet, adorn'd with a Cock's Feather, (the Officers either an Eagle's or a Heron's) a Doublet, with a

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Pair of Breeches, to which their Stockings are fasten'd, and Boots. Their Arms are a Sabre, Carabines, and Pistols. Before they begin an Attack, they lay themselves so flat on the Necks of their Horses, that it is hardly possible to discover their Force; but, being come within Pistol Shot of the Enemy, they raise themselves with such surprizing Quickness, and fall on with such Vivacity on every Side, that, unless the Enemy is accusom'd to them, it is very difficult for Troops to preserve their Order. When a Retreat is necessary, their Horses have so much Fire, and are so indefatigable, their Equipage so light, and themselves such excellent Horsemen, that no other Cavalry can pretend to follow them; they leap over Ditches, and swim over Rivers, with a surprizing Facility. The Queen of Hungary and the King of France have Troops under this Name in their Service, tho' it properly and originally signifies only Hungarians.

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Incamp. To incamp is the pitching of Tents, when the Army after a March is arrived at a Place where it is design'd to stay a Night, or longer. The Serjeants Tents in the Foot, and Quarter Masters of Horse, are the first of the Company or Troop. The Officers incamp in the Rear; the Subalterns in

one Line next the Company, fronting from it; the Captains in another Line at some Distance, each behind his own Company, fronting the Subalterns; the Field Officers behind them, the Colonel in the Centre, the Lieutenant Colonel on his Right, the Major on his Left, and the Sutlers behind all. Each Company makes

makes a Line in File, having an Allowance of seven Feet for a Tent, and two Feet Distance: The Tents of two Companies front one another, leaving a Street of 5 or 6 Yards between them. The Troops of Horse encamp the same Way, only the Distance between the Tents is about 3 or 4 Yards for the Forage, and the Space between two Troops, is 14 or 15 Yards for the Stables: At two Yards Distance from the Doors of their Tents, is a Rope called the Piquet Rope, stretched upon pointed Stakes, to which their Horses are tied. For the Ground allowed a Battalion or Squadron. See *Camp*.

Indented Line, is a Line running out and in, like the Teeth of a Saw, forming several Angles; so that one Side defends another. They are used on the Banks of Rivers, where they enter a Town; likewise the Parapet of the Covert Way is often indented. This is by the French Engineers called *Redans*. Small Places are sometimes fortified with such a Line; but the Fault of such Fortifications is, that the Besiegers from one Battery, may ruin both Sides of the Tenaille or Front of a Place, and make an Assault, without fear of being enfiladed, since the Defences are ruined.

Independent Troop or Company, is what is not incorporated into any Regiment.

Infantry. The whole Body of Foot Soldiers, whether Independent Companies, or Re-

giments. The Regiments of Foot Guards take Place of all others, the rest having Precedence according to Seniority. This Precedence is for the eldest Regiment to march in the Front, the next in the Rear, and so on with the rest. The eldest to encamp on the Right, the next on the Left, and so the rest in Course. The Officers of Foot command those of Horse in Garrison, but are commanded by them in the Field. See *Battalions*.

Engineer, or Engineer, a Person well skill'd in the Art of contriving all Sorts of Forts, and other Works; judicious in finding out Faults in all Fortifications, and knowing how to attack and defend all Sorts of Posts.

To Invest, or To Assault. Is to attack a Post by open Force, coming on without any Shelter to fall to handy Strokes, without making use of Trenches, Sappe, or other Forms of Art to gain Ground Foot by Foot. The Counterscarp is generally insulted or assaulted, to prevent the Enemy's having Time to spring the Fourneaux, or Fougasses, they have prepared. In these Attacks the Grenadiers commonly march at the Head of the other Troops; and there must be Pioneers ready to make a Lodgment, to secure the Post when gain'd.

Intrench'd. An Army is said to be intrench'd, when they have raised Works before them, to fortify themselves against the Enemy,

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Enemy, that they may not be forced to engage at a Disadvantage.

Intrenchment. Any Work that fortifies a Post against the Enemy's Attacks. It is generally taken for a Ditch or Trench, with a Parapet. Intrenchments are also made of Fascines, or Faggots, with Earth thrown over them; of Gabions, Hogsheds, or Bags fill'd with Earth, that cover the Men from the Enemy's Fire. See *Retrenchment*.

Invalid, is a Man who has

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spent his Time in the War, and is either, through Age, or by reason of his Wounds, rendered incapable of the Service. They are disposed of in Hospitals.

Investing a Place, is when a General having an Intention to besiege it, detaches a Body of Horse to possess all the Avenues; blocking up the Garrison, and preventing Relief from getting into the Place, till the Army and Artillery are got up to form the Siege.

K.

KETTLE, is a Term the Dutch give to the Battery of Mortars, because it is sunk under Ground. See *Battery*.

Klinkets, are a Sort of small Gates made through Palisadoes for Sallies.

L.

Laboratory. Signifies the Place where the Fireworkers and Bombardiers prepare their Stores.

Ladle for a Gun. A long Staff with a Plate at the End of it, bow'd half round, to put in the Charge into the Piece.

Lane. To make a Lane. To draw up Men in two Ranks facing one another, as on the Sides of a Street, or the like, for any great Person to pass through; or sometimes for a Soldier to run the Gauntlet.

Lanspesade. An Inferior Officer, subordinate to the Corporal, to assist him in his Duty,

and supply his Place in his Absence. In *France* he has some Allowance extraordinary, but not in *England*. He is generally exempt from Duty, except Rounds, and Centinels *Perdus*. He teaches the new Soldiers their Exercise, and has his Place at the Right of the second Rank. The true Name is *Anspesade*, but the *L* is added from the *French Article Le*.

Lieutenant of Horse, Foot, or Dragoons. The second Officer in the Troop or Company, who commands in the Absence of the Captain. When the Company

is at Arms, he takes the Left of the Captain; but the Right if the Ensign be there. He marches the Company in the Absence of the Captain; but when the Captain is present, his Post is in the Rear. When the Battalion marches in Line of Battle, the Lieutenants take their Post at the Head of the Divisions, according to their Seniority. He ought to inspect the Actions of of the Sergeants and Corporals, to keep them to their Duty, and take care of every thing that is necessary to the Company; to see them exercise, to cause them to keep their Arms clean and fit for Service, and to see that the Soldiers be provided of Powder and Ball.

Lieutenant Colonel of Horse, Foot, or Dragoons. The second Officer in a Regiment, and should be a Man of great Experience; knowing how to attack or defend a Post, lead the Regiment to Battle, and how to make a good Retreat. He is to see the Regiment kept to their Exercise, and is to know the Qualifications of all the Officers of the Regiment. In the Absence of the Colonel he commands the Regiment. His Post is on the Colonel's Left Hand, three Paces before the Captain's, when there is but one Battalion of Foot; but if the Regiment be of two, the Colonel commands the first, and he the second. Colonels and Lieutenant Colonels are excused from mounting the Guard when the Regiment is in Garrison. *Lieutenant Colonel*

of Horse is the same; he marches at the Head of the second Squadron. But the *French* have no such Officer.

Lieutenant General. A great Commander, next in Place to the General of an Army, who in Battle commands one of the Lines or Wings; a Detachment when they march, or a Flying Camp; a Quarter at a Siege, and one of the Attacks, when it is his Day of Duty. They ought to be daily with the General to know his Orders: They are allowed each two Aids de Camp, and a Foot Guard, mounted by a Subaltern, with a Sergeant and 30 Men.

Lieutenant General of the Artillery. The next to the General of the Artillery, who in his Absence has the whole Charge of all that belongs to it.

Lieutenant du Roy. The Deputy Governor of all strong Towns in *France*, who is a Check upon the Governor, and commands in his Absence.

Lieutenant Reform'd. Vide *Reform'd.*

Lieutenant en Second. Vide *Second.*

Life Guards. Vide *Gardes de Corps.*

Light Horse. This Name is given to distinguish them from the Men at Arms formerly used, who were all in Armour, as are now the *German Cuirassiers*. In *England* all are now call'd Light Horse, except the Troops of Life Guards. In *France* they except not only the *Gardes de Corps*, but the two Troops of Mus.

Musquetaires on Horseback, and all the Gendarmes. Each Regiment consists of six Troops, and is commanded by a Colonel, Lieutenant Colonel, Major, Captains, Lieutenants, Cornets, and Quarter Masters. They rank according to Seniority.

Line. In the Geometrical Sense signifies a Length without Breadth; in the Military Art it is taken several Ways.

Line. Is the drawing up of an Army for Battle, extending its Front as far as the Ground will permit, that it may not be flanked. The Turkish Armies often draw up in a crooked Line, or Half Moon, that, being very numerous, they may enclose their Enemies. Christian Armies generally draw up in three Lines; the first call'd the *Van*; the second, the *Main Body*; and the third, the *Reserve*; with a convenient Distance between them, and Intervals, that they may not put one another into Confusion.

Line. In Fortification it bears several Significations. In drawing a Plan upon Paper, it is only a plain Line drawn from one Point to another. On the Ground it is sometimes taken for a Trench with a Parapet, and sometimes for a Row of Gabions, or Bags full of Earth, to cover Men from the Enemy's Fire. So we say, 'When the Trenches were carried on within 30 Paces of the Glacis, we drew two Lines, one on the Right, and the other on the Left, for a Place of Arms.' To *Line a*

Work, is to trace it out. To *Line a Work*, is likewise to face it with Brick or Stone. Lines are sometimes made to cover a Country, especially by the French.

Line of Defence. A supposed Line that represents the Flight of a Ball; but particularly a Musket Ball, from the Place where the Musketeer must stand, to scour the Face of the Bastion. There are two Sorts of this Line; the *Fichant*, and the *Razant*, or *Flanking*.

Line of Defence fix'd, or fichant. Is a Line drawn from the Angle of the Curtin, to the Point of the opposite Bastion, which is not to exceed 800 Feet; or, as the French say, 120 Toises, because that is the Length of the Port of a Musket; and from the Point of the Curtin and Flank, the Face of the opposite Bastion is to be defended.

Line Razant, Stringent, or Flanking, or Second Flank. A Line drawn from the Point of the Bastion along the Face, till it comes to the Curtin, which shews how much of the Curtin will clear, or scour the Face.

Line forming the Flank. A Line drawn from the Angle, form'd by the two Demi Gorges of the Bastion, to the Angle at the Flank. This is only used by Dutch Engineers.

Capital Line. A Line drawn from the Point of the Bastion to the Point where the two Demi Gorges meet.

Lines of Circumvallation and Contravallation. See *Circumvallation* and *Contravallation*.

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Lines of Communication. Are Trenches that run from one Work to another, so that Men may pass between them; without being exposed to the Enemy: Therefore the whole Intrenchment round any Place is sometimes called a Line of Communication, because it leads to all the Works.

Lines of Approaches. See *Approaches*.

To line Hedges. To plant Musketeers along them under their Covert; to fire upon an Enemy that comes open, or to defend them from the Horse.

Lintstock. A Gunner's Staff, to which he fastens his Match, to discharge a Cannon.

Liziere. See *Foreland*.

Lockspit. The small Cut or Trench, of about a Foot wide, made with the Spade, to mark out the first Lines of a Work that is to be made.

Lodgment. A Work raised with Earth, Gabions, Fascines, Wool Packs, or Mantelets, to cover the Besiegers from the Enemies Fire. In conducting the Approaches, at certain Distances, are made Lodgments, or Places of Arms, to flank the Trenches, capable of holding a hundred Men, which serve as a Guard to the Trenches. But Lodgments made on the Glacis, Covert Way, Breach,

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&c. are much more dangerous, as they are more exposed to the Enemies Fire, and having less Earth. When it is resolved to insult the Covert Way, there must be great Provision made of Fascines, Sand Bags, and other Materials in the Trenches; and during the Action the Pioneers, with Fascines, Wool Packs, or Sand Bags, should be making the Lodgment; covering themselves as advantageously as possible from the opposite Bastion, or Place most to be feared.

Lunette. A small Work, Counter Guard, or Envelope, made in the Ditch before the Curtin. It consists of two Faces, making an Angle inwards. *Lunettes* are generally made in Ditches full of Water, to serve instead of a Fausse Braye, and dispute the Passage of the Ditch. The Terrepain of it is raised but a little above the Surface of the Water, and is but twelve Feet broad, with a Parapet three Fathoms thick, so that the whole Breadth of the *Lunette* is five Fathoms. See *Counter Guard* and *Envelope*.

There is another Sort of *Lunettes*, which are larger, and raised to cover the Faces of a Half Moon: They are likewise composed of two Faces, a longer and a shorter.

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MADRIERS. Long Planks of Wood very broad, used for supporting the Earth in Mining, in carrying on a Sap, in making Coffers, Caponiers, Galleries, and many other Uses at a Siege. They are likewise used to cover the Mouth of Petards after they are loaded, and are fixed with the Petards to the Gates, or other Places design'd to be forc'd open. When the Planks are not strong enough, they are doubled with Plates of Iron.

Main Body of the Army, is the Body of Troops that marches between the Advance and the Rear Guard. In a Camp, it is that Part of the Army which is encamped betwixt the Ring and Left Wing.

Main Guard, is a Body of Horse posted before the Camp, for the Safety of the Army. In Garrison, it is that Guard to which all the rest are subordinate. See *Guard*.

Major of a Regiment of Horse or Foot, is the next Officer to the Lieutenant Colonel, and generally made from eldest Captain. He is to take Care that the Regiment be well exercis'd, that it be drawn up in good Order at a Review, or upon a Parade, or any other Occasion; to see it march in good Order, and to rally it, in case of its being broke. He is the only Officer among the Foot that is allowed

to be on Horseback in Time of Action, that he may be the readier to execute the Colonel's Orders, either in advancing or drawing off the Regiment. He has an Adjutant appointed for his Assistant.

Major General, is the next Officer to the Lieutenant General. When there are two Attacks at a Siege, he commands that on the left. His chief Business is to receive the Orders every Night from the General, or, in his Absence, from the Lieutenant General of the Day, which he is to distribute to the Brigade Majors, with whom he is to regulate the Guards, Convoys, &c. and appoint the Place and Hour of their Rendezvous. He is to know the Strength of each Brigade in General, and of each Regiment in particular, and to have a List of all the Field Officers. Finally, he is in the Army, the same as the Major of a Regiment in the Regiment. He is allowed an Aid de Camp, and has a Serjeant and fifteen Men for his Guard.

Major of a Brigade. See *Brigade Major*.

Town Major, is the third Officer in a Garrison, and next to the Deputy Governor. His Business is to see the Guards mounted, the Rounds and Posts assign'd; he regulates the Centinels, goes every Evening to receive the Word from the Governor.

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vernor, and gives it out upon the Place of Arms, to the Adjutants and Serjeants of the Garrison; he goes his Round Major, visits the Corps de Gardes, and sees that all the Soldiers Arms are fixed, and in good Order; he causes necessary Ammunition to be distributed among them, orders the Gates to be opened and shut, and gives the Governor an Account of all that passes in the Place.

Mantelets. Blinds of thick Planks, Musket-proof, and often cover'd with Tin, or Latten, which the Pioneers generally roll before them, they being fixed upon low Wheels, or Trucks, to cover them from the Enemy's Fire. There are double Mantelets, which make an Angle, and stand square to form two Fronts, and cover the Front and Flank. These have double Planks, with Earth ramm'd in between them. They must be five Feet high, and three in Breadth. They are sometimes the Thickness of two or three Planks, bound together with Iron Plates. They are used in making Approaches and Batteries near the Place, as the others are in making Lodgments on the Counterscarp.

March, in general, is the Steps made in marching, or the moving of a Body of Men from one Place to another. The Beat of the Drum, when the Soldiers are upon March, or beginning to march, is likewise called The March. It is likewise a Word of Command when a Battalion

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is to alter its Disposition. The General and Assembly are beat before the March or Party, when an Army is to set out in a Morning.

Mareschal de Bataille. It was once a distinct Command; but this Duty being only Part of the Major General's, it is now executed by him.

Mareschal, or Marshal de Camp. A French General Officer, next in Post to the Lieutenant General. We find no Difference betwixt him and the English Major General.

Marines. Soldiers who serve on Board of Ships.

Marshal, or Mareschal of France, is the highest Preferment in the Army or in the Fleet: It is the same with Captain General. When two or more Marshals are in one Army, the eldest commands.

Vice Marshal in Germany, Holland, and lately Field-Marshal in England, is likewise the same with Captain General.

Master, or Maitre de Camp. No other than a Colonel of Horse, so call'd in France and Spain, where they give the Title of Colonels only to those that command Regiments of Foot and Dragoons; whereas with us they are all indifferently called Colonels.

Master de Camp General. The second General Officer over all the Regiments of Light Horse, and next to the Colonel General. He has a Regiment of Horse belonging to him, which takes the second Post of Honour next to the Colonel General's. This

too is in France, for there is no such among the English Officers.

Master of the Ordnance. See *General of the Artillery.*

Match. A Sort of Rope made on purpose, which once lighted at the End, burns on gradually and regularly, without ever going out as long as any of it is left. It was formerly us'd for firing Match Lock Muskets, and now for all sorts of great Guns. It is also laid in Mines that are to blow up so many Hours after, and the Time is regulated by the Length of Match there is to burn before the Fire comes to the Powder; and by the same Rule, those that are us'd so it, know how the Hours pass.

Matrasses. A Sort of Soldiers in the Artillery, next in Degree under the Gunners, who assist them about the Guns, in traversing, sponging, firing, loading, &c. They carry Firelocks, march along with the Store Waggons, as a Guard, and also as Assistants, in case a Waggon should break down.

Maxims in Fortification, are certain general Rules establish'd by Engineers, founded on Reason and Experience, which being exactly observed, a Place fortified according as they direct, will be in a good Posture of Defence. The chief Maxims are:

1. *There must not be any Part of a Fortification, but what is discover'd and flank'd by the Besieged.* For if there be any Part of a Place which is not well flank'd, the Enemy being there under Cover, will with the more

Ease attack it in that Place, and carry it.

2. *A Fortress should command all the Country round it; that the Besiegers may not cover themselves, nor find Places to favour their Approaches and Attacks, nor to overlook the Place, to batter the Works with more Advantage.*

3. *The Works furthest distant from the Centre of the Place, must be still lowest, and commanded by those that are nearer; to the End they may be defended by the higher Works, and those nearer the Place, that so the Enemy, by being exposed, may be obliged to quit them, after they have been possessed of them, because of the Fire of the Besieged; and likewise, that the Enemy, by being Masters of such Works, may not overlook the Works of the Place.*

4. *The flanked Angle, or Point of the Bastion, ought to be at least 70 Degrees; that it may the better resist the Force of the Enemy's Batteries, in case they designed to beat it down to lodge there.*

5. *The acute flanked Angle, near to a right Angle, is preferable to all other.* It is certain, if the flanked Angle be a right Angle, it has all the Strength can be given it, having Solidity enough to withstand the Enemy's Batteries: But an Angle near to a Right, makes the Tenaile of the Place more compact, by the Angle of the Shoulder's shortening and bettering the Defence, and by its not exposing the Face

so much to the Enemy. So that it follows of Consequence, that an Obtuse Angle is very deficient.

6. *The shortest Faces are the best*; because the longer they are, the weaker; for the Enemy attacks them with a great Front. However, they must be at least forty or fifty Fathoms long, to be able to defend the Outworks.

7. *The Flank must have some Part under Cover*. Which signifies, it must be cover'd by an Orillon, otherwise the Defence is presently ruined, and the Lodgment no sooner made on the Counterescarp, but the Place is obliged to capitulate.

8. *There must be a Conformity between these Maxims, to render the Fortification perfect*. For if the Gorge be large, the Face suffers. The more the Flank is cover'd, the less it is subject to be ruin'd, but then the Defence is more oblique. In making a second Flank, the flanked Angle is made too weak. In discovering the Face, the Defence is more easy, but it is more exposed to the Enemy's Batteries. In a word, there are Advantages and Disadvantages over all; and the Secret consists in judging whether conforming with one Maxim be more advantageous, than disagreeing with another.

Measure Angle. An Instrument of Brass for measuring Angles, either Saliant or Rentrant, to know exactly the Number of Degrees and Minutes, to lay them out upon Paper.

Merlon. That Part of the Pa-

rapet which is terminated by two Embrasures of a Battery; so that its Height and Thickness is the same with that of the Parapet; but its Breadth is ordinarily nine Foot on the Inside, and six on the Outside. It serves to cover those on the Battery from the Enemy: And it is better of Earth, well beat and close, than of Stone, because this flies about, and wounds those whom the Work should defend.

Military Execution. The ravaging and destroying a Country that refuses to pay Contribution.

Mine. An Overture made in a Wall or other Place, which is design'd to be blown up with Powder: It is composed of a Gallery and a Chamber. The Gallery is the first Passage made under Ground, being no higher nor no broader than to suffer a Man to work on his Knees. The Chamber is the small Space at the End of the Gallery, like a small Chamber, where the Barrels of Powder are deposited, for blowing up what is proposed to be sprung. When the Chamber is dry, the Powder is put in Sacks instead of Barrels. The Form of the Chamber is cubical; its Height and Depth being about six Foot. When the Mine is under the Rampart of an empty Bastion, left by the Thinness of the Earth on the Side next the Place, the Powder should burst forth that way; the Top of the Chamber is cut into two Passages like Chimneys, to oblige the Mine to have its Effect upwards. If the Chamber be

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be humid or damp, the Powder is put into Barrels or Caissons, and fir'd with a Saucifs. If the Places to be blown up are rocky, or if there happen to be any thing else in the Way to hinder the Miners, they make *Four-neaux*, *Arraignées*, or *Rameaux*, all which are the same thing, and signify Branches which terminate in small Mines, and are fired all together by several Saucisses. The Gallery of a Mine goes turning and winding; the Earth is put in small Baskets, and given out betwixt the Miners Legs backwards from one to another, because of the Narrowness of the Passage. The Earth of the Chamber is to be supported with Planks, and when the Chamber is damp, it must be floor'd with Boards.

Miners. Men appointed to work in the Mines, being a particular Company, commanded by a Captain of the Regiment of Fuzileers, which Regiment is appointed for the Service of the Artillery. When the Miner is at work, he wears a sort of Hood, to keep the Earth that falls out of his Eyes, this Hood throwing it over his Shoulders.

Minion Ordnance. A small Gun three Inches Diameter in the Bore, seven Feet long, weighing about 800lb. takes a Charge of two Pounds eight Ounces of Powder, and carries a Bullet two Inches seven Eighths Diameter, and three Pounds four Ounces Weight. Its Shot point-blank 120 Paces.

Minion of the longest Size. Is

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three Inches two Eighths in the Bore, eight Feet long, weighs 1000 lb. Its Charge 3 Pounds 4 Ounces of Powder, and carries a Bullet 3 Inches Diameter, and weighing 3 Pounds 12 Ounces. Its Shot Point-blank 125 Paces.

Moat, Ditch, or Fosse. A Depth, or Trench cut round a Town or Fortress; which lying under the Fire of the Ramparts, must therefore be also well flank'd. The Breadth and Depth of it is more or less, according to the Nature of the Earth. In general it ought to be so wide, that no Tree, or Ladder, can be laid over it; that is, from 16 to 22 Fathoms, and about 15 and 16 Feet deep. The Brink of the Moat next the Rampart, is called the Scarp, and that opposite on the other Side, is call'd the Counter-scarp, which forms a re-entering Angle before the Centre of the Curtin. A dry Moat round a Place that is large, and has a strong Garrison, is preferable to one full of Water, because the Passage may be disputed Inch by Inch, and the Besiegers, when lodg'd in the Moat, are continually exposed to the Bombs, Grenades, and other Fireworks, which are thrown incessantly over the Rampart on their Works. In the Middle of dry Moats, is sometimes made another small Moat, called the *Cuvette*, which is generally dug so deep, till they find Water to fill it. The deepest and broadest Fosses are counted the best; but a deep Fosse

Foss is preferable to a broad one. To drain a Foss or Moat full of Water, is to dig a Trench deeper than the Level of the Water, to let it run out. When it is drained, there are Hurdles thrown upon the Mud and Slime, and covered with Earth, or Bundles of Rushes, to make a sure and firm Passage.

Moineau. A French Term for a little flat Bastion raised upon a re-entering Angle, before a Curtin which is too long, between two other Bastions; it is commonly join'd to the Curtin, but sometimes separated by a Foss, and is then call'd a detach'd Bastion. They are not raised so high as the Works of the Place, because they must be exposed to the Fire of the Besieged, in case the Enemy should lodge themselves there. Their Parapet, as well as the Parapet of all Outworks, ought to be Cannon-Proof, that is to say, 18 Foot thick.

Mont Pagnote, or Post of the Invulnerable. An Eminence chosen out of Cannon-Shot of the Place besieged, where curious Persons post themselves to see an Attack, and the Manner of the Siege, out of Danger.

Mortar-piece. A very short Piece of Artillery, with an extraordinary large Bore, and a close Chamber: This to hold the Charge of Powder; the other to contain the Bomb, Carcass, or Fire-pot, &c. to throw. Mortars are sometimes mounted on low Carriages, like those used for Cannon at Sea, the Wheels

being each of one Piece. They are not fir'd right forward, like Cannon, but mounted into the Air, so that the Bomb ascending a vast Height, falls with the greater Force, and flies the further. Sometimes the Mortars are charg'd with Baskets full of Stones, which they throw into Towns, and do great Execution, because falling thick, there is no Place of Safety from them.

Mortars are used both at Sea and Land, but they differ very much in Form. A Sea Mortar is generally 13 Inches Diameter in the Bore, is longer and more reinforced than a Land Mortar, because they are fired with a greater Quantity of Powder; sometimes with 30 or 33 Pound. Some of them have their Bed or Stools of Metal, cast into a Piece with the Mortars; others have them of a thick square Piece of Oak, which, by the Help of Hand-Screws or Jacks, is turn'd round upon a strong Axis of Iron, to fire any Way. They carry Bombs of 200 Pound, and generally weigh about 9 or 10,000 Weight.

Land Mortars are of different Sorts; those used most in England, are, 10, 13, 15, and 18 Inches Diameter; but there are smaller Mortars of six and eight Inches. All but the 18 Inch Mortars are mounted on a very thick Plank of Oak, on which rise two Checks or Brackets on the Sides of the Mortar. But the 18 Inch is mounted on a low Dutch Carriage, consisting of two strong Planks of Wood, bound

bound with thick Plates of Iron, and join'd together with Transoms of Wood. All Land Mortars may be elevated to any Degree of the Quadrant. They have no Wheels, therefore on a March they are laid upon a Block Carriage made on purpose. They are never carried along with the Army, because of their great Weight, except upon an Occasion of a Siege or Bombardment; but a Sort of small Mortars, called *Hobits*, mounted in Gun Carriages, are always a Part of the Field Artillery.

Hand Mortars, are likewise of several Sorts. As *Tinkers Mortars*, which are fix'd at the End of a Staff, of about four Foot and a half long, the other End being shod with Iron to stick in the Ground, while a Soldier with one Hand keeps it in an Elevation, and with the other Hand fires. *Firelock Mortars* are fix'd in a Stock, with a Lock like a Firelock; they swing between two Arches of Iron, with Holes answering one another, by which the Mortar is elevated. These stand upon a Sole or Plank of Wood, and may be carried by one Man from one Place to another. There are more Sorts of Hand Mortars, but *Coeborne's* new Invention exceeds them all, so far as to deserve a particular Description. They are made of hammer'd Iron, of four Inches Diameter in the Bore, ten Inches and a half long, and nine Inches in the Chace, fix'd upon a Piece of Oak twenty Inches

long, ten and a half broad, and betwixt three and four thick. They stand fix'd at 45 Degrees of Elevation, and throw Hand Grenades, as all other Hand Mortars do. They are placed in the Bottom of the Trenches, at two Yards Distance from one another, having each a Soldier to serve it, and an Officer to every forty or fifty, who lays them to what Elevation he thinks convenient, by raising or sinking the hind Part of the Bed. Three or four Hundred of them are sometimes in Service at once, in different Parts of the Trenches, 60, 70, or 80 in a Place. Those in one Place fire all at once, immediately after the Batteries have done, and are answer'd from another Part of the Trench, which brings such a Shower of Hand Grenades into the Covert Way, that those who defend it, are thrown into unavoidable Confusion.

Motion of a Bomb, or Ball, is the Progress it makes in the Air after it is deliver'd, and is of three Sorts: The *Violent Motion* is the first Expulsion, when the Powder has work'd its Effect upon the Ball, or so far as the Bomb or Ball may be supposed to go in a right Line: The *Mix'd Motion* is, when the Weight of the Ball begins to overcome the Force which was given by the Powder; and the *Natural Motion* is, when the Ball or Bomb is falling.

Motions of an Army. The several Marches and Countermarches it makes, or the Changing

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ing of its Posts, either for better Ground, to force an Enemy to Battle, to avoid it, or the like.

Mouldings of a Gun or Mortar.

All the eminent Parts, as Squares, or Rounds, which serve generally for Ornament; such as the Breech Mouldings and Muzzle Mouldings. The Rings of a Gun are likewise call'd Mouldings.

To Mount the Guard, is to go upon that Duty: 'To mount a Breach, is to run up it, or to attack it: 'To mount the Trenches, is to go upon Guard in the Trenches.

Musket, or Musquet. The most commodious and useful Fire-Arm used in the Army, either in attacking or defending a Post: It is easily managed, and is carried with small Trouble, which makes its Use the more common. Formerly two Thirds of every Company were Musketeers, and the rest Pikemen; but the Pikes being laid aside in our Army of late, and Muskets brought in their Stead, shews, that tho' Pikes are useful, yet Muskets, with the Addition of Bayonets, are much more so, and can do better Service. They carry a Ball of 16 in the Pound. The Length of the Line of Defence is limited in Fortification, by the ordinary Distance of a Musket Shot, which is about 120 Fathom, (720 Feet, or 240 Yards) and almost all the Military Architecture is regulated by this Rule for the Length of the Defence, as the Effect of Cannon gives a Rule for the

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Thickness of the Ramparts and Parapets.

Musketeer, or Musqueteer.

A Foot Soldier, arm'd with a Musket, or Firelock, Sword, Bayonet, &c. In France there are two Companies, or rather Troops, the Grey and the Black, called *Mousquetaires du Roy*, or the King's Musketeers, composed all of Gentlemen excellently well mounted, who serve either on Foot or on Horseback, and signelize themselves upon all desperate Occasions, being there only for Preferment. An Instance of their Bravery they gave in the late Battle of *Dettingen*. The King himself is their Captain, and the Officer commanding each of them, is called Captain-Lieutenant; yet each of them commands as Colonel both of Horse and Foot, and accordingly take Place of all younger Colonels of either. They are reckon'd as *Gendarms*, and march next to the *Scotch Gendarms*.

Musketoon. A short Fire-Arm, with a very large Bore, to carry several Musket, or Pistol-Bullets, proper to fire among a Crowd, or to keep a Pass. It is the same as a Blunderbuss.

Muste. A narrow Review of Troops under Arms, to see if they be compleat, and in good Condition; that their Arms and Accoutrements be in good Order; thereby to know the Strength of an Army. The General may order either Muster or Review, as often as he pleases.

Muster

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Muste Master. For which see *Commissary General*.

Muste Rolls. The Rolls or Lists of the Companies or Troops, which are delivered to the Commissary by the Captains.

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Muzzle of a Gun or Mortar. The Extremity of the Cylinder, where the Powder and Ball is put in.

Muzzle Mouldings. The Ornament round the Muzzle.

N.

To Nail Cannon, or as some call it, *To cloy.* To drive a large Iron Spike by main Force into the Touch-hole of a Gun; or, for Want of Spikes, small Flints, or other Stones. This renders the Cannon unserviceable, either stopping up the Touch-hole, or, if the Spike be taken out, leaving it so large that it cannot be fir'd, because it takes too much Vent there. The Remedy is, to drill a new

Touch-hole. The most honourable Thing the Garrison of a Place besieged can propose to itself in a Sally, is to nail up the Enemy's Cannon, because it takes some Time to repair.

Neck of a Gun. That Part betwixt the Muzzle Mouldings and the Cornish Ring.

Neck of the Cascabel, is the Part betwixt the Breach Mouldings and the Cascabel.

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Oblique Defence. That which is under too great an Angle, as is generally the Defence of a second Flank, which can never be so good as a Defence in Front, nor is it approved by Engineers.

Octagon. A Figure of eight Sides, or Polygons, forming the same Number of Angles, and capable of being fortified with eight Bastions.

Officer in the Army. In general a Person having a Command in the Army. Those having Commissions from the King or General, are called *Commission'd*

Officers, which includes all from the General to an Ensign. Such as have no Commissions, but only Warrants from their Colonels, are called *Warrant Officers*, as Quarter Masters of Horse, and Surgeons. Those that have neither Commissions nor Warrants, are called *Staff Officers*, as Sergeants, Corporals, Landsknechts, &c.

General Officers, are such as command a Body of Troops of several Regiments, as the Field Marshal, Captain General, Lieutenant General, Major General, Brigadier General, Quarter Ma-

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ster General, and Adjutant General.

Field Officers, are those who have a Command over a whole Regiment, as the Colonel, Lieutenant Colonel, and Major.

Subaltern Officers, are the Lieutenants, Cornets, and Ensigns.

To open Trenches, is the first breaking of Ground by the Besiegers, in order to carry on their Approaches towards a Place. The Difference between opening and carrying on the Trenches, is, that the first is only the Beginning of the Trench, which is always turned towards the Besiegers: It is begun by a small Foss, which the Pioneers make in the Night-time on their Knees, generally a Musket Shot from the Place, or half a Cannon Shot, and sometimes without the Reach of Cannon Ball; especially if there be no Hollows or rising Grounds to favour them, or if the Garrison be strong, and their Artillery be well served. This small Foss is afterwards enlarged by the next Pioneers which come behind them, who dig it deeper by Degrees, till it is about four Yards broad, and four or five Feet deep, especially if they be near the Place; to the End the Earth which is taken out of it may be thrown before them to form a Parapet, to cover them from the Fire of the Besieged: The Place where the Trenches are opened, is called the End of the Trench.

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Open. A Word of Command, as *Open your Ranks backward to such a Distance*, is when the Ranks fall back without changing Aspect, observing their Right Hand Man and their Leaders. *Open your Files from the Centre*, is when they face outwards from the Centre: If there be an odd File it stands, the rest take the Distance commanded. *Open your Files to the Right or Left*.

Order. A Word of Command: As *Order your Firelock*, is the planting the But End of the Piece against the Middle of the Outside of the Right Foot, with the Lock outwards.

Order of Battle, is a Disposition of the Battalions and Squadrons of an Army, in one or more Lines, according to the Nature of the Ground, either to engage an Army, or to be reviewed by the General.

Orders. Notice given every Night by the General to the Lieutenant General of the Day, who conveys them to the Major General, and he to the Brigade Major, who gives them to the Adjutants, and they to the Sergeants, that the Army may know when to march; what Detachments, &c. are to go a-broad next Morning; when they are to forage or graze; when they are to muster or review, and many other Things. The Orders are generally given out in the Evening at the Head Quarters, where all the Generals meet at that Time. *Orders in general*, signify all that is commanded by a Superior Officer.

Ord.

Ordnance. All Sorts of Guns, Mortars, Firelocks, Carabines, Pistols, &c. all Sorts of Arms, or Stores, belonging either to Offence or Defence.

Master of the Ordnance. See *General of Artillery.*

Orgues. Thick long Pieces of Wood, pointed or shod with Iron, clear one of another, hanging each by a particular Rope or Cord over the Gateway of a strong Place, perpendicular, to be let fall in case of an Enemy. Their Disposition is such, that they stop the Passage of the Gate, and are preferable to Herpes or Portcullises, because these may be either broke by a Petard, or they may be stopped in their falling down, by a Wooden Horse, or other Contrivance. But a Petard is useless against an *Orgue*, for if it break one or two of the Pieces, others immediately fall down, and fill up the Vacancy; or if they stop one or two of the Pieces from falling, it is no Hindrance to the rest, for being all separate, they have no Dependence on one another.

Orillon, or Blind. A Mass of Earth faced with Stone, built on the Shoulder of a *Cazematted Bastion*, to cover the Cannon of the retired Flank, and hinder its being dismounted by the Enemy's Cannon. They are made sometimes round, and sometimes square. Some maintain the round to be best, because they are not so easily beat down by the Cannon of the Besiegers; for the Roundness hinders the Ball

very much from its Effect. Others like the square *Orillon* better, because they are less Charge, and can contain more Men to fire directly on the Face of the opposite Bastion, than the round can do. *Orillon* is likewise called the *Shoulder* and the *Epaulement*.

Orthographical Section, or Profile. Is that Draught which shews the Thickness, Breadth, Depth, and Height of any Work, as it would appear, if perpendicularly cut off from the highest to the lowest Part of it. It does not represent the Length of the Work, which the Plan does; but then the Plan does not shew the Height and Depth, but represents the Breadth.

Oval. A plain Figure bounded by its own Circumference, within which no Point can be taken, from which all Right Lines drawn to the Circumference can be equal.

Out-works, which are likewise call'd *Advanced Works*, *Detached Works*, and *Exterior Works*. Works of several Sorts, which cover the Body of the Place towards the Campaign; as *Ravelins*, *Half Moons*, *Tenailles*, *Horn Works*, *Crown Works*, *Counter Guards*, *Lunettes*, *Swallows Tails*, and the like. These serve not only to cover the Place, but likewise to keep an Enemy at a Distance, and to hinder his getting any Advantage of Hollows or rising Grounds that may happen near the Counterscarp of the Place: For these Cavities and Eminences may serve for Lodg-

Lodgments to the Besiegers, and facilitate the carrying on their Approaches, and raising their Batteries against the Town. It is a general Rule, that if there be several *Out-works*, one before another, to cover one and the same Tenable of a Place, those that are nearest the Place, must gradually, one after another, command those that are farthest advanced out into the Campaign; that is, must have higher Ram-

parts, that they may overlook and fire upon the Besiegers, when they have possess'd themselves of the farthest. The Gorges of them must be always plain, for fear if they had any Parapet, it might serve the Besiegers, when they are Masters of it, to cover themselves against the Fire of the Besieged; and therefore the Gorges are only palisado'd, to prevent Surprize.

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PALISADES. Long Pieces of Wood or Stakes, planted generally before Posts which might be taken by Surprize, or where the Access is very easy, to secure them both from a sudden and a regular Attack. They are generally eight Foot long, and six or seven Inches square; the one End is pointed, and the other is let three Feet perpendicularly into the Ground: Sometimes they are planted obliquely, pointing towards the Enemy, that in case the Besiegers should endeavour to pull them out with Cords, the Cords may slip off, having no Hold. Palisades are planted on the Berm, or Foreland, at the Foot of the Bastions of Places surrounded with a wet Foss, to prevent an Escalade or Surprize. They are likewise planted in the Bottom of dry Moats, especially if there be Traverses made. Sometimes they are set in the Gorges of Half Moons, and other Out Works.

But above all, the Parapet of the Covert Way must be well palisaded, either on the Parapet, or in the Covert Way. They are to stand so close, that the Muzzle of a Musquet can but just get betwixt them. The Method of planting them, is by digging a Trench of about a Foot, or a Foot and a half wide, and three Feet deep, and after the Palisades are set in as close to one another as before said, the Trench is then filled with Earth, which is beat and set very hard about the Palisades with Rammers. Palisades are very useful, and a good Defence in all sorts of Fortifications, provided they be well planted and close. They are likewise useful in Sieges, to plant on the Outside of the Fosses of the Batteries, to prevent the Besieged from surprizing the Batteries in their Sallies, and their nailing the Cannon. Palisades are either pulled up by shaking them with Ropes, cut down

down by the Grenadiers, beaten down with Cannon, or burned down with small Fascines pitch'd over.

Turning Palisades. An Invention of Coehorne's, to preserve the Palisades of the Parapet of the Redans from the Besiegers' Shot. He orders them so, that as many of them as stand in a Rod's Length, turn up and down like a Trap, with all the Facility imaginable. They are a good Defence, because they are not in Sight of the Besiegers, but just when they bring on their Attack, and yet are always ready to do the proper Service of Palisades. They are likewise frugal, because they may be preserved in the Magazines, and need not be left on the Parapet: Besides, there may be square Palisades kept ready to supply the Place of such as may be broke by the Besiegers' Cannon.

Pans. The same as the Face of the Bastion, *which see.*

Parade. The Place where Troops meet together to go upon Guard, or any other Service. In a Garrison, where there are two or three, or more Regiments, each has their parading Place appointed, where they are to meet upon all Occasions, especially upon any Alarm. In a Camp, all Parties, Convoys; or Detachments, that are to go Abroad, have a parading Place appointed them at the Head of some Regiment.

Pandours, or Croats. Infantry. Their Habit is first a Bonnet,

the hinder Point of which falls down upon the Back like a Sack; a large loose upper Garment, fix'd tight to their Bodies by a Girdle, with great Sleeves; and Linnen Breeches, which are also large, and reach down to their Ancles: Instead of Shoes they have a Piece of Leather, or perhaps a Felt, ty'd about the Foot with a Cord. They use Fire Arms well, and are excellent Marksmen: They carry a Fusil, and four Pistols: They make Use of great Sabres, a Cuttose, and another Instrument of Steel, made like a Rake, which they carry in their Bonnet, and which serves them for several Uses, particularly to defend themselves when they have no other Weapon at Hand: They wear Chains about their Necks, which they make Use of to secure their Prisoners.

Parallel. Tho' this be properly a Term in Geometry, yet being often used in Fortification, it deserves to be explain'd. Parallel Lines are those which are of an equal Distance from one another in every Part of them, and will so continue, tho' ever so far extended; so that they can never meet or draw nearer. opposite Sides of a Square, are parallel to one another. The Ranks of a Battalion are parallel, and so are the Files among themselves. The Counterſcarp is drawn parallel to the Face of its Bastion; and generally the Line of Approaches is drawn parallel to the Face of the

the Place attack'd, to prevent its being enfiladed, or scour'd in Length.

Parallels at a Siege, signify therefore the Trenches or Lines made parallel to the Defence of the Place besieg'd. They are likewise called *Lines of Communication*, and *Boyaus*.

Parapet. An Elevation of Earth, design'd for covering the Soldiers from the Enemy's Cannon or small Shot, wherefore its Thickness is from eighteen to twenty Feet. It is six Feet high on the Inside, and four or five on the Side next the Country. It is raised on the Rampart, and has a Slope above called the *Superior Talus*, and sometimes the *Glacis of the Parapet*, on which the Soldiers lay their Muskets for to fire over: This Pente or Slope makes it easy for the Musketeers to fire into the Ditch; or, at least, on the Counterescarp. To fire razing the Glacis of the Parapet, is called *fring in Barbe*. The exterior Talus of the Parapet, is the Slope facing the Country. The Height of the Parapet bein six Feet on the Inside, it has a Banquette or two for the Soldiers who defend it, to mount upon, that they may discover the Country the better, as likewise the Foss and Counterescarp, to fire as they find Occasion.

Parapet of the Covert Way, or *Coridor*, is what covers that Way from the Sight of the Enemy, which renders it the most dangerous Place for the Besiegers,

because of the Neighbourhood of the Faces, Flanks and Curtins of the Place. It is the same with Glacis, which signifies that whole Mass of Earth that serves to cover the Coridor, and goes sloping towards the Country.

The Name of *Parapet* is given in general to any Line that covers Men from the Enemy's Fire; so there are Parapets of Barrels, of Gabions, and of Bags filled with Earth.

Park of the Artillery. A Post in the Camp, appointed by the Quarter Master General in the Rear of both Lines of the Army, out of Cannon Shot of the Enemy, and fortified to secure the Magazines and Ammunition; where, to prevent Accidents of Fire, only Pikemen do Duty. Every Attack at a Siege has its Park of Artillery. The Ammunition Waggons in a Park form the two or three first Lines, and the pontoons and Tombrils the last. The whole is surrounded with Ropes. The Gunners and Matrosses encamp on the Flank, and the rest of the Train in the Rear. Here are kept all the Arms and Utensils necessary for a Siege; as Bombs, Petards, Carcasses, Hand Grenades, Powder, Ball, &c. with all sorts of Instruments for removing the Earth, as Spades, Shovels, Pickaxes, Bills, Hoes, and Wheelbarrows, with many Things more.

Park of Provisions, is the Place where the Sutlers pitch their Tents, and sell Provisions to the Soldiers,

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Soldiers, which is in the Rear of each Regiment; but the chief of all is the Ground allotted at the Head Quarters for the Sutlers, where there is still every thing to be had, and it is from thence for the most Part that the other Sutlers are furnish'd. But in fact, the Place where the Bread Waggon's are drawn up, and where the Soldiers receive their Ammunition Bread, being the Store of the Army, is properly the Park of Provisions.

Parley. To beat or sound a Parley. Vide *Chamade*.

Partisan. A good Partisan is an able cunning Soldier, well skill'd in commanding a Party, who knows the Country, and how to avoid Ambushes, surprize the Enemy, or get Intelligence.

Partisan Party. A small Body of Infantry given to a Partisan, to make an Incurſion upon the Enemy, to lurk about their Camp, to disturb their Foragers, and to intercept their Convoys.

Partuisan, or Pertuisan, is a Weapon sometimes carried by Lieutenants, not unlike a Halbert.

Party. A small Body of Horse or Foot, sent into the Enemy's Country to pillage or take Prisoners, or to oblige the Country to come under Contribution, which is to pay a certain Sum of Money, to redeem themselves from Plunder. Parties are often sent out by a General to view the Way and Roads, and to gain Intelligence; to look for

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Forage, or to amuse the Enemy. Upon a March they are frequently sent upon the Flanks of the Army, to discover if the Enemy is near, and to prevent the Army's being surpriz'd. The late King of France, to prevent Robberies, order'd that all Parties of Enemies, under fifteen in Number, that did not produce an Order under a commanding Officer's Hand, if taken, should be sent to the Gallies as Robbers.

Party Bleu. A Company of Villains who used to infest the Roads in the Netherlands; they belonged to neither Army, but robbed both Sides, without any Regard to Passes.

Pas de Souris. See *Foreland*.

Passé Volans. See *Faggots*.

Patee. A small Work, or Platform, like that they call a Horse-shoe, not always regular, but for the most Part oval, encompass'd with a Parapet, without any other Defence except only that fore right, and having nothing to flank it. They are commonly erected in marshy Grounds to cover a Gate of a Town.

Patrouille, or Patroll. A Round going about in the Night, consisting generally of five or six Men; (or of fewer, if Horse) commanded by a Serjeant, that sets out from the *Corps de Garde*, to see what is done in the Streets, and keep Peace and Quietness in the Town.

Pavilion. An old Term for a Tent.

Pay. The Wages given to a Soldier for his Maintenance in his

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his Prince's Service, and is greater or less, according to the Custom of several Countries.

Pay Master. He who is entrusted with the Money, and has the Charge of paying the Soldiers in each Regiment. There is a *Paymaster General* of the Army.

Pedrero, or Pattarero. A small Sort of Cannon, mostly used on the Quarter Deck of Ships, to fire Stones or broken Iron upon Boarding. Some of them are made to open at the Breech, to take in the Charge that way.

Peloton. Vide *Platoon*.

Pentagon. A Figure of five Sides, and as many Angles, capable of being fortified with the same Number of Bastions.

Perpendicular. A right Line falling from, or raising itself upon another, upright, and making the Angles on both Sides equal.

Petard. An Engine of Metal, almost in the Shape of a Sugar Loaf, about seven or eight Inches deep, and about five Inches over at the Mouth, and at the Bottom one and a half. It is charged with fine Powder well beaten, and made for breaking open Gates, Draw Bridges, Barricades, and Barriers. The Thickness of Metal at the Neck is half an Inch, and that of the Breech considerably more. Its Charge of Powder 5lb. or thereabouts, and it weighs about 55 or 60. *Pickets* are much larger and stronger *Petards*, and there are likewise smaller: The first are employ'd in breaking open strong

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reinforc'd Gates, and the last such as can make but small Resistance. When the *Petard* is loaded with Powder, it is put upon a *Madrier*, or strong Piece of Plank, cover'd with a Plate of Iron on the Outside, which covers the Overture, being hollowed a little for the Purpose; the Place where they join is done over with Wax, Pitch, and Rosin, to enforce the Effect. This being done, it is carried to the Place designed to be blown up, where joining the Plank exactly to the Gate, the *Petard* is stayed behind, and fired by a Fusée, that the *Petardeer* may have Time to get off. They are sometimes used in Counter Mines, to break through into the Enemy's Galleries, to disappoint their Mines.

Petardeer. He who loads, fixes, and fires the *Petard*, who ought to be a Man of Courage, for he is often exposed.

Pickaxes. Used in digging Ground when too hard for the Spade; but too common to require more to be said of them, tho' a Tool very necessary in an Army.

Picket, or Piquet Guard. Vide *Guard*.

Picket. A small pointed Staff shod with Iron, which serves to mark out the Angles of a Fortification, and the principal Parts, when the Engineer is tracing a Plan upon the Ground with a Line. There are likewise small pointed Stakes, which serve to drive through Fascines or Gabions,

zons, to keep them fast when the Earth is bad, or the Work raised in Haste.

Pickets, are moreover the Stakes which the Troopers drive before their Tents, about two Yards Distance. From one to another of these Pickets is stretch'd a Rope, called the *Picket Rope*, to which they tie their Horses.

A *Picket*, is likewise a Stake of nine or ten Feet high, fixed in the Ground, and standing upright: Round the Foot of it are small Sticks with sharp Points: This is at the Head of each Regiment of Horse, to punish Crimes that do not deserve Death, by putting the Criminal with his Foot on one of these small pointed Sticks, and tying up his Hand to a Ring above his Head, so that he neither stands nor hangs, nor can he shift his Foot, nor change Feet to ease himself.

Piece of Ordnance, includes all Sorts of great Guns and Mortars. Battering Pieces are the large Guns used at Sieges for making the Breaches, such as the 24 Pounder and the Culverin; the one carrying 24, and the other 18lb. Ball. Field Pieces are 12 Pounders, Demi Culverins, 6 Pounders, Sakers, Minions, and 3 Pounders, which march with the Army, and encamp always behind the second Line, but in Day of Battle are in the Front. A Soldier's Fire-lock is likewise called his Piece.

Pike. A Weapon for a Foot Soldier, made of a long Staff, small and round, and arm'd at

the End with a sharp Iron Spear. Formerly, in a Company of Foot, two Thirds were Musketeers, and the others Pikemen. The Pikes were fourteen or sixteen Feet long. When a Battalion was form'd to engage Horse in open Field, the Pikes were so ordered, that they might face and charge every Way, to cover not only the Musketeers, but the Colours, Drums, and Baggage. Bayonets, or short Swords, made to fix to the Muzzles of Muskets, serve now instead of Pikes.

Half Pike. The Weapon carried by an Officer of Foot, and differing from a Pike, because it is but eight or nine Foot long, and the Spear is smaller and narrower.

Pile, or Pyramid of Bombs or Balls. The way of disposing them in Magazines, or the piling them up regularly in the Courts of the Arsenal, as may be seen at *Woolwich*: As suppose 385 Bombs to be made in a Pile, the first must be laid in a Square of ten on each Side, which makes 100 in the first Bed, and let half a Foot in the Ground; to the end, the great Weight which comes above them may not force them to slide out, for then the whole Pile falls: The second Bed will be eighty one, which is nine of a Side, and must be laid on the vacant Space which happens between every four Bombs of the first Bed, and the third Bed being eight of a Side, is sixty four, laid the same way, and so to the Top of the

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Pile; which will terminate in one Bomb making a Pyramid, whose Basis is a Square.

Pioneers. Such as are commanded in from the Country, to march along with an Army for mending the Ways, for working on Intrenchments and Fortifications, and for making Approaches; but the Soldiers are most generally employ'd in all these Things.

Pivot. A Piece of Iron or Brass rounded at the Point, that it may turn easily round in a Piece, or Socket of Iron or Brass, hollowed to receive it.

Place. The Word commonly signifies a Fortress, or Town fortified regularly or irregularly, and is often used; tho' frequently we say it is a strong Place.

Place of Arms. Thus absolutely taken, is a strong City chosen for the chief Magazine of an Army.

Place of Arms in a Garrison. A large open Spot of Ground, either in the Midst of the City, where the great Streets meet, or between the Ramparts and the Houses, for the Garrison to rendezvous in, upon any sudden Alarm, or other Occasion. In Places regularly fortified, the *Place of Arms* ought to be in the Centre, and a Figure like that of the Polygon; its Greatness ought likewise to be proportioned to the Polygon.

Place of Arms of an Attack, or of a Trench. A Foss with a Parapet, or an Epaulment, to cover a Body of Horse or Foot,

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where they may be at their Arms to withstand the Sallies of the Besieg'd. The Places most convenient for making *Places of Arms*, are such as can easily succour one another, and are out of Sight of the Defences of the Place besieged, as Hollows, or hollow Ways, especially if they cross one another, for their Depth serves as a Parapet to cover the Infantry: If they have not that natural Depth, they may supply that Defect with Gabions, Sand Bags, or whatever can hinder the Besiegers from seeing into it. If there be a Foss made round it, it is called a Redoubt. In carrying on the Trenches, there must be such Redoubts raised at convenient Distances to lodge the Infantry, which have the Guard of the Trenches.

Place of Arms in a Camp. The Place chosen at the Head of the Camp, for the Army to form themselves in a Line of Battle, for a Review, or the like.

Place of Arms for a Troop of Horse, or Company of Foot, is the Place where the Troop or Company are assembled.

Plan, Ground Plot, or Ichonography in Fortification. The Representation of the first or fundamental Tract of a Work, shewing the Length of its Lines, the Quantity of its Angles, the Breadth of the Ditches, Thickness of the Rampart and Parapets, and the Distance of one Part from another: So that a *Plan* represents a Work, such as it would appear, if it were cut

cut equal with the Level of the Horizon, or cut off at the Foundation. But it marks neither the Heights nor Depths of the several Parts of the Works, which is properly Profile, and which expresses only the Heights, Breadths, and Depths, without taking Notice of the Lengths. As Architects, before they lay the Foundation of their Edifice, make their Design on Paper, by which Means they find out their Faults; so an Engineer, before tracing his Works on the Ground, should make *Plans* of his Designs upon Paper, to the End he may do nothing without serious Deliberation. *Plans* are very useful for Generals or Governors, in either attacking or defending a Place, in chusing a Camp, determining Attacks, conducting the Approaches, or in examining the Strength and Weakness of a Place; especially such *Plans* as represent a Place with the Country about it, shewing the Rivers, Fountains, Marshes, Ditches, Valleys, Woods, Houses, Churches, and other Particulars, which happen about a Place.

Planks, or Madriers. Pieces of Oak very thick and broad. See *Madrier*.

Plates. The *Prise Plates*, are two *Plates* of Iron on the Cheeks of a Gun Carriage from the Cape-square to the Centre, thro' which the *Prise Bolts* go, and on which the Hand Spike rests, when it poises up the Breech of the Piece. *Breast Plates* are the two *Plates* on the

Face of the Carriage, one on each Cheek. *Train Plates*, are the two *Plates* on the Cheeks, at the Train of the Carriage. *Dulidge Plates*, are the six *Plates* on the Wheel of a Gun Carriage, when the Fellows are joined together, and serve to strengthen the *Dulidges*.

Platform, in general, is an Elevation of Earth on which Cannon is placed, such as the Mounts on the Middle of the Curtins: But it is likewise a Sort of Bastion constructed on a Re-entring Angle, when its two Faces make a right Line. *Platform of a Battery*, is a Floor of Boards nailed down upon Sleepers, sloping a little towards the Embrazure, for the Guns to run upon, and to keep the Wheels from sinking into the Ground. The Slope serves to diminish the Reverse of the Piece, and for the more easy running her up to her Embrazure. Each Gun has generally a *Platform* for herself. See *Battery*.

Platoon, or rather *Peloton*. A small Square of Musqueteers, such as is used to be drawn out of a Battalion of Foot, when they form the Hollow Square to strengthen the Angles. The Grenadiers are generally thus posted. *Peloton* is the French Word, only the vulgar Corruption has brought it to be pronounced *Platoon*.

Poniard, a Sort of short Sword used in Spain and Italy.

Point-blank of a Gun. The Distance she throws a Ball in a sup-

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supposed direct Line; the Gun being laid at no Elevation, but levelled parallel to the Horizon. I say, supposed direct Line, because it is certain, and easily proved, that a Ball cannot fly any Part of its Range in a right Line; but the swifter it flies, the nearer it approaches to a right Line; or the less crooked its Range. The *Point-blank* of any common large Cannon is not above 180 Paces.

Polygon. A Figure of more than four Sides, and is either regular or irregular, exterior or interior. Also the Figure or Spot of Ground that is to be, or is fortified.

Polygon regular. A Figure whose Angles and Sides are equal. It has an Angle of the Centre, and an Angle of the *Polygon*. The Centre of a regular *Polygon* is the Centre of a Circle, which circumscribes the *Polygon*, that is, whose Circumference passes thro' all the Angles of the Figure.

Irregular Polygon. Whose Sides and Angles are unequal.

Exterior Polygon. The Lines drawn touching the Points of the Flank Angles, when a Place is fortified inwards; or the Out Lines of all the Works, drawn from one outmost Angle to another quite about.

Interior Polygon. To fortify outwards, which makes the Angles of the *Polygon* to be the Angles of the Gorge, so that the whole Bastion is without the *Polygon*. The main Body of the Work, or Town, excluding the Outworks,

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Pont de Junc. See *Bridge*.

Ponton. A Boat of Lattin, or Tin, about 8 Yards long and two broad. The Form of it is a long Square, having a large Ring at each Corner. It is laid upon a Carriage when the Army marches, and drawn by 5 Horses. Each Boat has an Anchor and Cable, and Baulks and Chests belonging to it. The Baulks are about 5 or 6 Inches square, and about 7 Yards long. The Chests, or Boards joined together by Wooden Bars, about a Yard broad, and 4 Yards long. When there is Occasion for using these Boats, they are slipped into the Water, and placed about two Yards asunder, each fastened with an Anchor, having besides a strong Rope, which runs through the Rings, and is fastened on each Side of the River to a Tree, or a Stake made very fast in the Ground. The Baulks are laid cross the Boats, at some Distance from one another, and the Chests upon them joined close; which makes a Bridge in a very short Time for Horse, Foot, or Artillery to march over.

Pont Volant. See *Bridge*.

Port Fire. A Composition of Meal Powder, Sulphur, and Saltpetre, ram'd into a Case of Paper, but not very hard. It is about 9 or 10 Inches long, and is used to fire Guns or Mortars instead of a Match; but then it is cut into Pieces of about an Inch long, and put in a Linstock, or cleft Stick.

Post.

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Post. Any Spot of Ground, whether fortify'd or not, which is capable of lodging Soldiers. So we say, 'To gain a Post with Sword in Hand', 'To relieve the Posts', that is, the Guards of the Posts.

Post of Honour. The Advance Guard is a Post of Honour: The Right of the two Lines is the Post of Honour, and is always given to the eldest Regiments: The Left is the next Post, and is given to the next eldest, and so on; the Centre of the Lines being the Post the least honourable, and is given to the youngest Regiments.

Advanced Post. A Spot of Ground seized by a Party to secure their Front, and cover the Posts behind them.

Postern. A small Door in the Flank of a Bastion, or other part of a Garrison, to march in and out unperceived by the Enemy, either to relieve the Works, or to make Sallies.

Pouch. A Grenadier's Pouch, is a Square Case or Bag of Leather, with a Flap over it, hanging in a Strap of about two Inches broad, over the left Shoulder, in which he carries his Grenades.

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Powder. A Composition of Sulphur, Saltpetre, and Charcoal Dust. The Sulphur and Charcoal take fire, and the Saltpetre makes the Crack.

Pounder. A 24 Pounder is a Gun carrying a Ball of 24 lb. Its Diameter is six Inches, the Length is from ten to twelve Foot. And so of the rest. See Cannon and Bullet.

Priest's Cap. Vide *Benet a Prestre*.

Proclamation. Vide *Ban*.

Provisions. Are all Sorts of Food for the Army.

Profile. Engineers, to represent the Heights, Depths, and Thickness of a Work, with the Depth and Breadth of the Fosses, &c. do it by Profile or Orthography, which supposes the Work to be cut perpendicularly from Top to Bottom. See *Orthographical Section*.

Provost Marshal. An Officer appointed to seize and secure Deserters, and all other Criminals, and to set Rates on Provisions in the Army. He has a Lieutenant, and a Clerk, and a Troop of Provosts, or Marshal's Men on Horseback; as also an Executioner.

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Quadrant, or Quarter of a Circle. An Instrument of Brass or Wood, used by Gunners, in pointing Guns to an Object, and by Bombardiers in elevating their Mortars: It is

made of two Pieces of Wood, or Brass, join'd at right Angles, one of which is longer than the other, that it may enter the Muzzle of the Piece. They are joined by a Quarter of a Circle,

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Circle, which is divided into ninety Degrees, the Centre of which is where the two Pieces join, from whence there hangs a Thread with a Plummert, which marks the different Elevations of Pieces, and the Greatness of the Angles. The Way of using it, is by putting the longest Side into the Muzzle of the Piece; when the Plummert falls perpendicularly, and marks the Angle on the Quadrant. When the Gun or Mortar is elevated to the Degree desir'd, it is kept there by Coins of Wood put under the Breech of a Gun, or betwixt the Bracket-Bolts of a Mortar.

To Quadrat, or Square a Piece, Is to see whether it is duly placed, and well pois'd, on the Carriages and Wheels.

Quarter. Signifies the sparing of Mens Lives, and giving good Treatment to Enemies vanquish'd. So we say, 'The Conquerors offer'd good Quarters', 'The Enemy ask'd Quarter', 'We gave no Quarter'.

A Quarter. Signifies not only the Ground a Body of Men incamps on, but the Troops themselves. Therefore we say, 'To beat up the Enemy's Quarters', 'Such a Quarter is well fortify'd'.

Quarter of an Assembly. The Place where Troops meet to march in a Body, and is a Place of Rendezvous.

Quarter at a Siege. The Encampment upon one of the principal Passages round about a Place besieged, to prevent Re-

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lief and Convoys: When it is commanded by the General, it is called the *Head Quarters of the Army*; When the Camp is mark'd out about a Place besieged, then the Quarters are said to be disposed: When great Detachments are made from a Quarter for Convoys, &c. such a Quarter is said to be weaken'd.

The Head Quarters, where the General of an Army has his Quarters, is generally near the Centre of the Army. The Quarters of the Generals of Horse, are in the Villages that happen between the Right and Left Wings. The Generals of Foot are often in the same Village with the General in chief.

Quarter entrench'd. A Place fortified with a Ditch and Parapet, to secure a Body of Troops.

Winter Quarters. Sometimes is taken for the Interval of Time between two Campaigns; but more generally for the Place or Places where Troops are lodg'd during the Winter. So we say, 'The Army is marching into Winter Quarters', 'The Winter Quarters are settled', 'The Winter Quarters will be but short'.

Quarters of Refreshment. The Place, or Places, where Troops that have been much harass'd are put in to recover themselves, during some Time of the Summer, or Season for the Campaign. This is often done in hot Countries during the violent Heats.

Quarter Master. An Officer whose principal Business is to look

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look after the Quarters of the Soldiers. There is a Quarter-master-General of the Army. Every Regiment of Foot has a Quarter-master, and every Troop of Horse one.

Quarter Master of Horse. A Warrant Officer, appointed by the Colonel. He takes up the Ground for the Troop, and divides it, in allotting so much for each Tent. He receives the Orders, keeps a List of the Troop, visits the Stables, and takes care of the Arms. He marches in the Rear of the Troop, but in Camp his Tent is pitch'd in the Front. In Winter Quarters he receives and distributes the Forrage to the Troop.

Quarter Master of Foot. An Officer who takes care of encamping the Regiment. He attends the Quarter Master General upon a March, to know where the Ground is for the Regiment, which he divides among the Companies.

Quarter Master General. A considerable Officer in an Army, who ought to be a Man of great Judgment and Experience, and to understand Geography; for since his Province is to mark the Marches and Encampments of an Army, he should know the Country perfectly well, all the Rivers, Plains, Marshes, Woods, Mountains, Passages, Defiles, &c. even to the smallest Brook. The Evening before a March, he receives the Orders and Route from the General, and appoints a Place for the Quarter Masters

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of Foot and Horse to meet him next Morning, with whom he marches to the next Camp, where being come, and having viewed the Ground, he marks out to the Quarter Masters the Ground allowed each Regiment for their Camp. He chuses the Head Quarters, and appoints the Villages for the General Officers of the Army, where they shall quarter. He appoints a proper Place for the Encampment of the Train of Artillery. He carries the Army a foraging, and plants the Covering Party, for their Security, at all the Passes round them, and assists in distributing the Winter Quarters to the Army.

Quarter Wheeling of a Body of Men, is turning the Front where the Flank was; which is done to the Right by the Man on the Right Angle keeping his Ground, and facing about while the rest wheel.

Queue d'Yronde, or Swallow's Tail. A detach'd, or Outwork, whose Sides open towards the Head, or Campaign, and draw closer or narrower towards the Gorge. There are single and double Tenailles, and Hornworks, call'd by this Name of *Quies d'Yronde, or Swallow's Tail*, for this sole Reason, because their Sides, instead of being parallel, open towards the Head, and grow narrow at the Gorge. When these Works are cast up before the Front of a Place, they have this Fault, that they do not sufficiently cover the Flanks of the opposite Bas-

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tions; but, besides that Engineers sometimes must work according to the Ground and Situation, they have this Advantage, that they are extraordinary well flank'd by the Place, which discovers all the Length of their Sides the better. See *Tenaille*.

Quit your Arms. A Word of

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Command in the Foot, when they lay down their Arms, at which they stand up, till they are ordered to the Right about, when they march clear off their Arms and disperse: But upon the Beat of Drum they run to their Arms with a Huzza, having their Swords drawn, and the Point upward.

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R Abanet. The smallest Piece of Cannon but one, between a Falconet and a Base, being one Inch and four Eighths Diameter in the Bore, five Feet six Inches long, 300 lb. Weight, takes a Charge of six Ounces of Powder, and carries a Shot one Inch and three Eighths Diameter, and eight Ounces Weight. The Point-blank Shot of the Piece is 70 Paces.

To Raise a Siege. To give over the Attack of a Place, and to quit the Works thrown up against it, and the Posts taken about it. If there be no Cause to fear a Sally from the Place, then the Siege may be raised in the Day time, by sending away first the Sick and Wounded, the Baggage, the Sutlers, broken Cannon and Mortars, and if possible, all the Instruments which have been used in the Siege. The Artillery and Ammunition may follow, and a strong Rear-Guard must face the Besiegers, in case they should offer to charge the Rear. But if there be any Fear of an Ene-

my in Front, this Order must be alter'd according to the Prudence of the General, and as the Nature of the Country will allow.

To raise a Plan of a Fortress. The measuring with Cords, and Geometrical Instruments, the Length of the Lines, and the Capacity of the Angles, that by knowing the Length, Breadth, and Thickness of all the different Parts of a Fortification, it may be represented in small upon Paper, so as to know the Advantages and Disadvantages of it.

Rampart. Some will call it *Rampire*, but improperly. The great massy Bank of Earth rais'd about a Place to resist the Enemy's great Shot, and cover the Buildings. On it is raised a Parapet towards the Campaign. It is not to be above three Fathom high, and ten or twelve in Thickness, unless more Earth be taken out of the Ditch than can be otherwise bestowed. The Rampart of Half Moons is the better for being low, that the Muskets of the Defendants may the

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the better reach the Bottom of the Ditch; but it must be so high as not to be commanded by the *Covert Way*. A Rampart ought to be sloped on both Sides; that is, the Mass of Earth which composes the Rampart, ought to be larger at Bottom than at Top, more or less, according to the Nature of the Earth: It ought to be broad enough to allow the marching of Waggon and Cannon, besides the Parapet which is raised on it. As the Earth which makes the Rampart, is taken from the Outside of it, because then the Rampart and Foss are made at the same Time, it follows, that their Proportions depend on one another; for since the Rampart is made of a certain Bigness, the Foss must be dug deep enough to afford Earth for the Rampart, the Parapet, and the Esplanade.

Rendezvous. The Place where Troops are to assemble. See *Rendezvous*.

Ranforce Ring of a Gun. That which is next before the Touch-hole, between it and the Trunnions. See *Reinforc'd*.

Rank. The Order or streight Line made by the Soldiers of a Battalion or Squadron, drawn up Side by Side. This Order was establish'd for the Marches, and for regulating the different Bodies of Troops and Officers which compose an Army or a Battalion.

Doubling of the Ranks, is the putting of two Ranks into one.

Ration. A Portion of Ammunition, Bread, or Forrage,

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distributed to every Man in the Army. A Foot Soldier receives a Ration of Bread, which is a Pound and a half for each Day; and a Trooper a Ration of Bread, and another of Forrage.

Ravelins. Works raised on the Counterscarp before the Curtin of a Place, and which serve to cover the Gates of a Town and the Bridges. They consist of two Faces forming a Salient Angle, and are defended by the Faces of the neighbouring Bastions. The Half Moons, which cover the Points of the Bastions, have their Defences from the Ravelins. They are the most in use of all Outworks, and are by the Soldiers called Half Moons. They ought to be lower than the Works of the Place, that they may be under the Fire of the Besieged, in case the Enemy should endeavour to lodge themselves there. Their Parapets, as those of all Outworks, ought to be Cannon Proof; that is to say, about 18 Foot thick. Their Ramparts ought to be the half or third of one of the Flanks of the Place, and the Breadth of their Moats half the Breadth of the Moat of the Place.

Raxant. Line of Defence
Raxant. Vide *Line*.

Rear. In general is the Hindmost part of a Battalion or Army, or the Ground behind it.

Rear, or *Rear Guard*. The last of the three Lines of an Army drawn up in Battalia, whereof the first is the Van, or Van Guard, the second the Main
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Body, and the last the Rear Guard, or, by another Name, the Corps de Reserve, or Body of Reserve. The old Grand Guards of the Camp, are always the Rear Guard of the Army, and are to see that every thing comes safe up to the new Camp.

Rear Half Files. The three hindmost Ranks of the Battalion, when it is drawn up six deep.

Rear Line of an Army encamp'd, or *second Line*, is always 4 or 500 Yards distant from the first Line, which is likewise called the Front Line. These two Lines run parallel, and have sometimes a third, which is called a Reserve.

Rear Rank, is the last Rank of a Battalion, when drawn up.

Recoil of Cannon. The Motion or Run it takes backwards when fir'd, caus'd by the Force of the Fire, which, when the Piece is discharged, seeking every Way to fly out, drives the Gun back, and the Powder and Ball forwards. Guns whose Vents are a little forwards in the Chace, usually recoil most. A Cannon generally recoils ten or twelve Feet, to lessen which, the Platform of the Batteries is commonly made to incline, or stoop a little towards the Embrasures.

Recruits. New Men rais'd to supply the Places of such as have lost their Lives in the Service, or are render'd unserviceable by Age or Wounds. Recruit-Horses are the Horses bought up for completing the

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Regiments of Horse or Dragoons every Year.

Rectangle. See *Angle*.

Redans, or Indented Works, are Lines or Faces that form sallying and re-entring Angles flanking one another, and are generally used on the Sides of a River, which runs through a Garrison Town. They were used before Bastions were, and are by some thought preferable to them. The Parapet of the Covert Way is generally carry'd on in this Manner.

Redoubt. A small square Fort, to serve for a detach'd Corps de Garde. They are used to secure the Lines of Circumvallation and Contravallation, and the Approaches. They are also made sometimes upon every Traverse of the Trenches, to defend the Workmen against the Sallies of the Besieged. They are often used before strong Towns, at Musket Shot Distance, and cover the Sallies of the Garrison. These Redoubts are sometimes greater, and sometimes less; but their Parapet, not being to resist Cannon, is only eight or nine Feet thick, with two or three Footbanks, and the Ditch about the same Breadth and Depth. The Length of their Sides may be from ten to twenty Fathom. They are likewise called Places of Arms.

Reduce a Place. To oblige the Governor to surrender it to the Besiegers by Capitulation.

Reduit, Castle, or Don-jon. A Place more particularly entrenched, and separated from the rest

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rest by a Foss. There is generally in each of them a high Tower, from whence the Country round the Place may be discovered.

Reform. To reform, is to reduce a Body of Men, by either disbanding the whole, or only breaking a Part, and retaining the rest; or sometimes by incorporating them into other Regiments.

Reform'd Officer. One whose Troop or Company is broke, and he continued in whole or half Pay, doing Duty in the Regiment. He preserves his Right of Seniority, and continues in the Way of Preferment.

Regiment. A Body of several Troops of Horse, or Companies of Foot, and commanded by a Colonel, Lieutenant Colonel, and Major. Independent Companies belong to no Regiment. The Number of Troops, or Companies, that are to form a Regiment, has never been ascertain'd, no more than the Number of Men that are to form a Troop or Company. For there are Regiments of Horse of 300 Men, and some in Germany of 2000. So there are Regiments of Foot of 12 or 13 Companies, which may make 7 or 800 Men, and the Regiment of Picardy in France consists of 120 Companies, which, at 50 in a Company, amount to 6000 Men. In England our Regiments are generally from 10 to 13 Companies, one of which is always Grenadiers. Regiments of Horse are most commonly six Troops, but some of

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them nine. *Dragoon Regiments* are generally in Time of War eight Troops, and in Time of Peace but six. Each Regiment has a Chaplain, and a Surgeon.

Regular Attacks. Such as are made in form; that is, by *Regular Approaches*.

Reinforced Ring of a Gun. That next the Trunnions, between them and the Vent. The reinforced Part of a Gun, is from the Base Ring to the Reinforced Ring, being much thicker of Metal than any other Part of the Piece, because of the Force of the Powder.

Reinforcement to an Army. An Addition of fresh Troops to strengthen an Army, and to enable them to go on with an Enterprize.

Relais. See Foreland.

Relieve. To relieve the Guard, is to put fresh Men upon the Guard. To relieve the Trenches, is to relieve the Guard of the Trenches, by sending off those who have been there upon Duty before.

Remount. To remount the Cavalry or Dragoons, is to furnish them with Horses in the room of those which have been either killed or disabled.

Reserve, or Corps de Reserve. A Body of Troops sometimes drawn out of the Army, and encamped by themselves in a Line behind the other two Lines. See Camp, Line of Battle, Rear Guard.

Rendezvous. A Place appointed by the General, where all the Troops, which compose

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an Army, are to assemble at a Day prefixed.

Retirade. A Trench, with a Parapet. But *Retirade*, or *Cou-pure*, is most ordinarily taken for a Retrenchment formed by the two Faces of a Re-entring Angle in the Body of a Place, after the first Defence is ruined, and the Besieged are obliged to abandon the Head of the Work, without quitting it entirely: Therefore, while some are making Head to the Enemy, others ought to be busy in making the *Retirade*, which is only a simple Barricade or Retrenchment thrown up in haste, with a Sort of Foss before. It depends upon the Knowledge of the Engineer to direct, and the Honour of the Officers and Soldiers to work at such a Time, since they do it for the Defence of their Liberty; and no Officers ought to think it below him to carry Fascines, Gabions, Barrels, or to throw up the Earth to cover himself. The *Retirade* ought to be raised as high as possible; and some Fourneaux or Fougades made under it, to blow up the Enemies Lodgments.

Retreat, or Tat-too. A Beat of the Drum in the Evening, at the firing of a Piece, called the *Warning Piece*, at which the Drum Major, with all the Drums of the Battalion, except such as are upon Duty, beats round the Regiment: The Drums of the Quarter Guards, of the General's Guard, and all other small Guards, do likewise beat, the Trumpets at the same Time

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soundings at the Head of their respective Troops. This is to warn the Soldiers to forbear firing, and the Centries to challenge till Break of Day, that the Reveille is beat. The *Retreat* is likewise called *Setting the Watch*.

Retrenchment. Any Work raised to cover a Post, and fortify it against an Enemy, such as Fascines loaded with Earth, Gabions, Barrels of Earth, Sand Bags, and generally all Things that can cover the Men, and stop the Enemy. But it is more particularly applicable to a Foss bordered with a Parapet; and a Post fortified thus, is called a *Post retrenched*, or *strong Post*. *Retrenchments* are either general or particular.

General Retrenchments, are new Fortifications made in a Place besieged, to cover the Defendants, when the Enemy become Masters of a Lodgment on the Fortification, that they may be in a Condition of disputing the Ground Inch by Inch, and of putting a Stop to the Enemy's Progress, in Expectation of Relief. As, if the Besieged attack a Tenaille of the Place which they judge the weakest, either by its being ill flanked, or being commanded by some neighbouring Ground; then the Besiegers make a great *Retrenchment*, inclosing all that Part which they judge in most Danger. These ought to be fortified with Bastions and Demi Bastions, with a good Foss, and should be higher than the Works of

of the Place, that they may command the old Works, and give the Besiegers great Trouble in covering themselves; they ought likewise to be countermined.

Particular Retrenchments, are such as are made in the Bastions, when the Enemy are Masters of the Breach. They can never be made but in full Bastions, for in empty or hollow Bastions there can be made only *Retirades*. These *particular Retrenchments* are made several Ways, according to the Time they have to cover themselves: Sometimes they are made before-hand, which is certainly the best; and a *Retrenchment* made before-hand requires no more Men for its Defence, than if it were not made, because they never defend it till the principal Work be lost. The Parapets of such *Retrenchments* ought to be 5 or 6 Feet thick, and five Feet high, with a large deep Foss, from whence ought to run out small Fougades and Countermines.

Returns of a Mine. The Turnings and Windings of the Gallery. See *Gallery* and *Mine*.

Returns of the Trench. The several Bendings and oblique Lines of the Trenches, drawn in some Measure parallel to the Sides of the Place attack'd, to prevent being enfiladed, or having the Enemy's Shot scour along the Length of the Line. These Returns make a great

Distance between the Tail and the Head of the Trenches, which are but at a small Distance going the strait Way. When the Head is attack'd by any Sally, the Volunteers and Braves among the Besiegers leap over the Line, and run out of Shelter to repulse the Sally, and cut off the Enemy's Retreat.

Reveille. A Beat of the Drum about Break of Day, to advertise the Army that it is Day-light, and that the Centries forbear challenging.

Reverse, signifies on the Back, or behind. So we say, 'Reverse View, 'a Reverse commanding Ground, 'a Reverse Battery, &c.

Review. The drawing out all, or Part of the Army in Line of Battle, to be viewed by the General in Chief, or other great Officer, that he may know the Condition of the Troops.

Rhinland Rod. A Measure of two Fathom, or 12 Feet, used by the Dutch Engineers.

Rhomb, or *Lozange*. A square Figure that has the four Sides equal, but not the Angles, whereof two are obtuse, and two acute. It is what we vulgarly call *Diamond-cut*, like the Glasse of old Windows.

Rhomboids. A four-sided Figure, whose Angles and opposite Sides are equal, but all its four Sides are not equal.

Rideau. A small rising Ground or Eminence, commanding a Plain, which is sometimes near parallel to the Works of a Place.

Place. It is a great Disadvantage to have *Rideaus* near a Fortification, especially when they shoot from far, and terminate on the Counterscarp; for they not only command the Place, but likewise facilitate the Enemy's Approaches. It is properly so called, because *Rideau* in French is a Curtain drawn by Nature to hide Men from the Town.

Rideau, is likewise a Trench, covered with Earth, in Form of a Parapet to cover the Soldiers.

Roll, Muster Roll. A Scroll of Parchment, which each Captain gives the Muster Master, on which are writ the Names of the Soldiers of his Company.

To roll in Duty, is when Officers of the same Rank take their Turns upon Duty, as Captains with Captains, and Subalterns with Subalterns, and command according to the Seniority of their Commissions.

Rollers. Round Pieces of Wood of about 9 Inches Diameter, and four Foot long, which serve in moving Mortars from one Place to another, when it is near, by raising the fore Part of the Bed so high, that one of these *Rollers* may be laid under it; then pushing the Bed forwards, and laying another in its Way, and another before that, and so on: Thus the Mortar is with little Trouble brought to another Place.

Round. A Night Watch commanded by an Officer, who goes round the Rampart of a Garri-

son, to listen if any Thing be stirring without the Works, and to see that the Centries be diligent upon their Duty; and that every Thing be in order. In strict Garrisons, the *Rounds* go every Quarter of an Hour, that the Rampart may still be furnished. The Centries ought to challenge at a Distance, and are to rest their Arms as the *Round* passes, letting no Man come near them. When the *Round* is near the *Corps de Garde*, the Centry calls aloud, *Who comes there?* When it is answered, *The Round*; he says, *Stand*, and calls for the Corporal of the Guard, who, drawing his Sword, calls, *Who comes there?* and is answered, *The Round*. Then, *Let him who has the Word advance*. The Corporal receives the Word with his Sword drawn, and pointed at the Heart of him who gives it. When the Major goes the *Round*, the Officers of the Guard receive him with two Musqueteers, and give him the Word only once, which is when he goes his *Round Major*. When the Governor goes his *Round*, the Officers draw out the Guard without Arms, and send four Musqueteers to receive him at ten Paces Distance, and give him the Word as often as he pleases to demand it. All other *Rounds*, without Exception, are obliged to give the Word to the Corporal of the Guard.

To Run the Gauntlet. A Punishment for considerable Offences. When a Soldier is sentenced to *Run the Gauntlet*, the Regiment

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Regiment is drawn out, and make a Lane, each Soldier having a Switch in his Hand. The Criminal's Shoulders and Back are naked, and as he runs along, every one has a Stroke at him. While he runs, the Drums beat at each End of the Lane. Sometimes he runs three times, some-

times five; and sometimes seven times, according to the Nature of the Offence. If it be intended to make the Punishment rigorous, the Officers have a watchful Eye to see that the Men do not favour the Criminal, and punish any that presume so to do.

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Sac à Terre. Vide Canvas Bags.

Safe Guard. A Protection which the Prince, or his General, gives to some of the Enemy's Country, to secure them from being ravag'd by his Men, or quartered upon. Soldiers left in such Places, to secure them against their own Men, are called Safe Guards.

Saker, the lowest Sort. A Cannon three Inches and four Eighths Diameter in the Bore, eight Feet long, 1400 Weight: Its Charge of Powder is three Pound six Ounces, and it carries a Bullet three Inches and two Eighths Diameter, and four Pounds twelve Ounces Weight. The point-blank Shot of it 150 Paces.

Saker, ordinary. A Gun three Inches, six Eighths Diameter in the Bore, nine Feet long, 1500 Weight; takes 4lb. for its Charge of Powder, and carries a Bullet three Inches and four Eighths Diameter, and six Pounds Weight. Its point-blank Shot 160 Paces.

Saker of the largest Size. Four Inches Diameter in the Bore,

ten Feet long, 1800 Weight, its Charge 5lb. of Powder; the Diameter of its Shot 3 Inches and six Eighths, the Weight of it seven Pounds five Ounces, the point blank Shot of the Piece 163 Paces. They are all very good Field Pieces.

A Sally, in *French, Sortie.* The issuing out of the Besieged from their Works, and falling upon the Besiegers to cut them off, and destroy their Works; as they often do in successful Sallies, killing many Men, destroying the Trenches and Batteries, and nailing the Cannon. We say, 'To make a Sally', 'To repulse a Sally', 'To cut off a Sally', that is, to get between them that made it and Home. When a Place besieged is weak in Men, they make few Sallies; but when the Garrison is strong, and the Inhabitants numerous, the Governor ought to disturb the Enemy by Sallies, which ought to be as frequent as possible. Those who make the Sally, are to be arm'd with short Arms, and are to have Grenades, Firepots, Gouderons

and Pioneers, to destroy and level the Enemy's Works.

To Salute a Prince, or Person of extraordinary Quality, at his coming into a Garrison, is the firing of the Cannon round the Place. On less Occasions, the small Arms of a particular Corps only salute. Likewise in the Field, when a Regiment is to be viewed by a King or his General, the Drums beat a March as he approaches, and the Officers salute one after another as he passes by, stepping back with the right Foot and Hand, and bowing the Spears of their Half Pikes to the Ground, and afterwards recovering them gently, and bringing up the Foot and Hand, and planting them. As soon as they have saluted, they are to pull off their Hats without bowing, but standing upright. The Ensigns salute all together, bringing down their Colours near the Ground directly before them at one Motion, and having taken them up again gently, lift their Hats. If it be a Review of the Army, every Battalion is to salute with Musquets and Bayonets charged. We call any of these Actions *A Salute*.

Sand Bags. Bags containing about a cubical Foot of Earth, used for raising Parapets in Haste. See *Canvas Bags*.

Sap, or Sappe. A Trench dug gradually deep under the Earth, to pass under the Glacis, and open a Way to come under Cover to the Passage of the Moat. After they have overcome all

the Obstacles which the Besieged have opposed to hinder the Advancement of their Approaches, and that notwithstanding their frequent Sallies, they are at last got near the Foot of the Glacis, the Trench is carried directly forwards, the Workmen covering themselves the best Way they can, with Blinds, Woolpacks, Sand Bags, or Mantelets upon Wheels. When they are got to the Foot of the Glacis, they make Epaulments or Traverses on each Side to lodge a good Body of Men. The Sap is made five or six Fathom from the Saliant Angle of the Glacis, where the Men are only cover'd sideways; wherefore they lay Planks over Head, with Hurdles and Earth above them. * Having by this Means obliged the Enemy to quit the Covert Way, the Pioneers, with Mantelets, Woolpacks, or Sand Bags, make immediately a Lodgment, covering themselves the most advantageously they can from the Fire of the opposite Bastion. Formerly this Word *Sappe* signified a Hole dug under a Building, in order to overthrow it. When a Covert Way is well defended by Musketeers, the Besiegers must make their Way down into it by *Sappe*. Vide *Descent*.

Sarrazine. The same as *Herse*, or Portcullices. See *Herse*.

Saucisse. A long Train of Powder roll'd up in a Pitch Cloth, and sew'd together in Length, so that it may reach from the Fourneau, or Chamber of the

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be Mine, to the Place where the Engineer stands to spring the Mine. It may be about two Inches Diameter. There are generally two *Sauciffes* to every Mine, that if the one fails, the other may hit. *Sauciffes* are also used to fire *Caiffons*, which see.

Sauciffons, or *Sauciffes*. Faggots made of the Bodies of Underwood, or of the large Branches of great Trees, wherein they differ from *Fascines*, which are of small Wood. The *Sauciffon* is bound in the Middle, and at both Ends, and serves to cover the Men, and make *Epaulments*, and for other Uses. They are about a Foot and a half, or two Feet thick, and four Feet long. They are good to stop Passages, and being mixed with Earth and *Fascines*, to make *Traverses* over a wet Ditch.

Scalade, or *Escalade*. A furious Attack upon a Wall or Rampart, contrary to Form, and with no Precaution to secure the Men, carried on with Ladders, to insult the Wall by open Force.

Scale. A right Line, or Rule, divided into equal Parts, representing Miles, Fathoms, Paces, Feet, Inches, or any other Measure; it is used in making Plans upon Paper, in giving each Line its true Length. Gunners have also a peculiar *Scale*.

Scarp, or *Escarpe*. The interior Talus or Slope of the Ditch, next the Place, at the Foot of the Rampart or *Liziere*.

Scenography, which is likewise called *Prospect* or *View*, is

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the natural Representation of a Place, such as it appears to us when we look upon it from without, considering its Situation, the Form of its Walls, the Number and Figure of its Steeples, and the Top of its Buildings, both publick and private.

Sclavonians, or *Waradins*. Infantry. Their Cloathing is nothing more than a Cassock, of white coarse Cloth, which comes down to their Knees, and which they bind to their Bodies with a Leather Thong: Their Breeches are very large, made of Linnen, and come down to their Ancles: Their Shoes are a Piece of Skin, or Felt, tied to their Feet with Cords: On their Heads they have a Bonnet of black Felt, which rises up like a Sugar Loaf, but round, and not with a sharp Point, the Brim of which is cut with a Peak. Their Arms are a Fusil, and Pistols; the But End of their Fusil serves them for a Spade, when they have Occasion to throw up Earth: They carry also a great Knife; and, when they kill their Enemies, they have a sort of Satisfaction in putting them out of their Pain with this Weapon. Besides these Weapons, they carry also a Sort of Mace, which they use to great Advantage, by reason of their extraordinary Strength: They easily knock down a Horse, or break open a Gate with it, without Trouble.

To scour the Length of a Line. To rake it from End to End with the Shot; so that every Bullet which comes in at one End,

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sweeps all along to the other, and leaves no Place of Security.

Second Captain, or Lieutenant in Second. One whose Company has been broke, and he is join'd to another, to act, and serve under the Captain, or Lieutenant of it, and receive Pay as reform'd. There are also *Second Captains* and *Lieutenants* of the first Creation; that is, who were never so in the other Companies; but particularly *Second Lieutenants* are much used among the Foot in *France*, and in some *English* Regiments.

Seniority. The Order of Time elaps'd since the first raising of two Regiments, or of the Officer's receiving their Commissions. In the Line of Battle, the Squadrons of Horse are posted on the Right or Left of the Line, according to the *Seniority* of the Officers, that is, of their Commissions; for the Colonels of Horse command by the *Seniority* of their Commissions: But this Method is not observed among the Foot; for their Colonels have Precedence and Command, according to the *Seniority* of their Regiments. The Captains in the same Regiment of Horse or Foot, roll, and have Place among themselves, according to the *Seniority* of their Commissions; and their Troops or Companies have no Preference one before the other, but by the Date of their Captains Commissions. The first Captain failing, his Company of the first becomes the last in the Battalion, and the second becomes the first. As for

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Subalterns, the *Seniority* of their Commissions does not alter their Post, but they roll, and ascend or descend with their Companies.

Sentinel, or Centinel. A private Soldier taken out of the *Corps de Garde*, and posted upon any Spot of Ground, to stand and watch carefully for the Security of the said Guard, of any Body of Troops, or Post, and prevent any Surprize from the Enemy.

Sentinel perdu. A Centinel posted near an Enemy in some very dangerous Post, where he is in perpetual Hazard of being lost.

Sergeant. An Officer without Commission, or a Staff Officer, above a Corporal, in a Company of Foot, or Troop of Dragoons. Sometimes he commands small Detachments, and, among other Things, it is his particular Duty to see the Men keep their due Distances. Generally common Companies have two *Sergeants* each. He must read and write, and his Weapon is a Halberd. They are oblig'd to keep a List of the Soldiers and their Lodgings, and to visit them often. They are to teach the Company the Exercise of their Arms, and how they are to preserve their Ranks and Files. Their Post on a March is on the Flanks, to cause the Company to march in good Order. A *Sergeant* of each Company is to be on the Parade at Night, to receive the Orders and the Word from the Adjutant, which he is

to carry to his Captains and Subalterns. When the Adjutant comes, the *Sergeants* place themselves in a Ring with him, according to the Precedency of their Companies, with their Hats on the Spears of their Halberds; and after he has given them the Orders, he whispers the Word to the first *Sergeant*, who gives it to the next, and so on, till it comes to the youngest, who gives it to the Adjutant. They acquaint the Officers who are to go next upon Duty. They visit the Men's Arms, and distribute Ammunition to them.

Sergeant-Major. Vide *Major*.

Shot. All Sorts of Bullets for whatsoever Fire-Arms, from the Cannon to the Pistol. Those for Cannon are of Iron; those for Muskets, Carabines, and Pistols, of Lead. At Sea they use *Chain* and *Bar Shot*, which are two whole, or half Bullets join'd by an Iron Bar, or Chain, which gives them Length to cut all they meet with. They are very useful to cut an Enemy's Sail and Rigging. Vide *Bullet*.

Shovels. Us'd in all Works, too well known to need a Description.

Shoulder of a Bastion. Where the Face and Flank meet. See *Epaule*.

Sides of Horn Works, Crown Works, Tenuilles, and such like Out Works, by the French call'd Ailles, or Wings, are the Ramparts and Parapets that enclose them on the Right and Left, from the Gorge to the Head. These Sides, when they are not longer than Musket Shot, are

generally strait Lines, because then they are flank'd from the Place. But if the Sides are above Musket Shot, they are sometimes indented, or made with Redans; or else there are Traverses, or cross Intrenchments, cut in their Ditch. So that it is more dangerous attacking the Sides of these Works than the Head.

Siege. The Encampment of an Army entrench'd and fortified round a Place, with an Intention to take it. When a General designs to *besiege* a Place, he must first order it to be invested by a Body of Horse, under the Command of a Lieutenant General, to prevent any Succours from entering the Place. The Method of encamping in a *Siege* differs from that on a March: For in a *Siege* the Army surrounds the Place, that nothing may enter, and lies without Cannon Shot of the Town. If the Place be situated on a River, Part of the Army is detach'd to the other Side; and Bridges of Communication are made above and below the Town, with Redoubts guarded by a Body of Foot. If the Place be encompassed with Mountains, they possess all the Heights from whence they can gaul the Enemy. At a *Siege* the Army encamps with their Backs to the Place; Battalions and Squadrons interlined. The Engineers trace the Lines of Circumvallation and Contravallation, with Redoubts and Angles, at proper Distances, and every Regiment works at
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the Place appointed them. The Line of Circumvallation is without the Camp, to prevent Succours. The Line of Contravallation is that betwixt the Army and the Place, and it covers the *Besiegers* from the Sallies of the Garrison. When the General has disposed his Camps, placed his Guards, and establish'd the Lieutenant Generals to command in the particular Quarters, with Orders for their Conduct, he goes with the Engineers to view the Place, and orders the Attack in the Quarter he judges the weakest: But because it is difficult to find two Places situated after the same manner, so it is hard to make two *Sieges* in the same way. For there are some Towns, where, without opening Trenches, the *Besiegers* advance immediately, and lodge themselves on the Counterscarp, by the Facilitation of hollow Ways, Ruins, Cavities, or weak Suburbs: And there are others, where the Ground is better managed, where, within Cannon Shot of the Out Works, there is nothing which can facilitate the Enemy's Approaches. To such fort of Places, which are the best, there must be Trenches and Approaches to gain the Ground Foot by Foot, which renders such *Sieges* dangerous and very long, because of many Accidents which happen daily in the Attacks, Sallies, Mines, and other Accidents of War.

To make or form a *Siege*, there must be an Army sufficient to furnish five or six Reliefs for

the Trenches, Pioneers, Guards, Convoys, Escorts, and what else may happen: An Artillery, with Magazines furnished with a sufficient Quantity of Ammunition, and Provisions: And an Hospital with Physicians, Chirurgeons, &c. and Medicines.

To turn a *Siege* into a *Blockade*, is to give over the Attacks, and possess all the Avenues leading to the Place, to hinder any Succours or Convoys getting into it, with a Design to take it by Famine.

To raise a *Siege*, is entirely to abandon the Design, upon the Approach of a superior Army, or the meeting with insurmountable Difficulties. See *Raise*.

Sillon. A Work raised in the midst of a Ditch to defend it, when it is too wide. This Work has no particular Form, but, as it runs, forms little Bastions, Half Moons, and Redans, or Indentures, which are lower than the Rampart of the Place, but higher than the Covert Way. This Name of *Sillon* is going out of Use, and they now call it Envelope. Vide *Envelope*, *Counterguard*, and *Lunette*.

Single Tenaille. Vide *Tenaille*.

Sixain. An antient Order of Battle for six Battalions; which, supposing them to be all in a Line, is formed thus: The second and fifth Battalions advance and constitute the Van; the first and sixth fall back into the Rear, or *Corps de Reserve*, and the third and fourth remain on the same Ground for the main Battle. Every Battalion ought to have

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have a Squadron of Horſe on its Right, and another on its Left. Any Number of Battalions, produced by the Multiplication of fix, may be drawn up in this Order; for twelve Battalions will make two Sizains, eighteen will make three, and ſo on. Vide *Cinquain*.

Skirmiſh. A ſudden Encounter of two ſmall Bodies of Men, when they fight in Confuſion without obſerving Order.

A Soldier. He that is liſted, and receives Pay, to ſerve his Prince or State in the Wars, either on Foot, or on Horſeback.

To ſound the Trumpet. Vide *Trumpet*.

Spades, forthrowing up Works, do not need any thing particular to be ſaid of them.

To ſpin Hay, is to twiſt it up in Ropes very hard, for an Expedition in the Winter Time; each Trooper carrying as much as he can behind him.

Spunge of a Gun. A long Staff put into a Roll of Wood, which is cover'd over with a Sheep's Skin, the Wool outwards, to ſpunge and clean the Gun. As ſoon as the Gun has fir'd, a Matroſs is ready with the *Spunge*, while another claps his Finger on the Vent to ſtop the Air, and ſtiſle what Fire may remain in the Chamber. The *Spunge*, Rammer, and Ladle, after the Gun is loaded, are laid under her betwixt the Wheels.

Spurs. Are Walls that croſs a Part of the Rampart and join to the Town Wall.

Squadron. A Body of Horſe,

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the Number not fixed, but from an Hundred to two Hundred Men, ſometimes more, and ſometimes leſs, according as Generals ſee fit, the Army is in Strength, and Occaſion requires. It is uſually compoſed of three Troops, each 50 Troopers. A greater Number than 200 can never be advantageouſly poſted, nor have Room to act in narrow Grounds. The eldeſt Troop takes always the Right of the Squadron; the ſecond the Left, and the young-eſt the Center. A Squadron is always drawn up three deep, that is to ſay, in three Ranks; having the Length of a Horſe, or rather more, between Rank and Rank. The Standard is always in the Center of the firſt Rank. When the Army is encamp'd, a Squadron of Horſe is allow'd 30 Paces for their Front, and 30 Paces Interval between one Squadron and another: On a March, the Squadrons of the ſame Column ought to keep a convenient Diſtance.

Square. A Figure well known to be compoſed of four equal Sides, and four Right Angles.

Long Square. Has right Angles, but two of the Sides are long, and the other two ſhort.

Square Battalion of Men. That which is compoſed of an equal Number of Men in Rank and File, or when the Number of Men in each File is equal to the Number of Men in each Rank.

Square Battalion of Ground, is when the Ground of the Flanks is of the ſame Extent, as the Ground of the Front and Rear.

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To make a Square Battalion of Men, whose Number is known, as 50, take the nearest Radix or Square Root, which is seven, for the Number of Men in Rank and File. To make a Square Battalion of Ground, the Number being likewise determin'd, as 60, that Number must be multiply'd by 3, which is the Number of Feet that every Man takes in Front, and the Product 180 divided by 7, which is the Number of Feet that each Man taketh up in Deepness, or the Distance of the Ranks: The Quotient is 25; the Square Root of which is 5, which is the Number of Men in each File; and if by this Radix 5, you divide 60, the Quotient is 12 for the Number of Men in each Rank.

Hollow Square. A Body of Foot drawn up with an empty Space in the Middle, for the Colours, Drums, and Baggage, facing, and cover'd by the Bayonets every Way, to oppose the Horse.

Standard. A Piece of Silk or Damask, about a Foot and a half square; on which is embroidered the Arms, Device, or Cypher of the Prince, or of the Colonel. It is fixed on a Lance about 8 or 9 Feet long, and carried in the Center of the first Rank of the Squadron. In rainy or bad Weather, it has a Case of Leather over it.

Star Redoubts, are now out of Use, the Square being found more convenient. They were made with Saillant and Re-entrant Angles, and had from 5 to

8 Points; and each of their Sides or Faces was from 12 to 25 Fathom long.

Sub Brigadier. A Post in the Troops of Guards, next under a Brigadier.

Sub Lieutenant. An Officer in Regiments of Fusileers, and in Companies of Grenadiers, where there are no Ensigns, having a Commission as youngest Lieutenant, and Pay only as Ensign; but takes Place of all Ensigns, except the Guards.

Storm. See *Affault*, *Infult*.

Straw. A Word of Command to dismiss the Soldiers when they have grounded their Arms, so that they be ready to return to them upon the first firing of a Musket, or Beat of Drum.

Subsistence. Is Money paid Weekly, Monthly, or otherwise, to Soldiers, for them to subsist on till the general Pay Days, when they receive what more is due to them; for the Subsistence is always less than the Pay, because their Cloaths, Accoutrements, Tents, Bread, &c. are to be paid. It is likewise the Money paid the Officers upon Account, till their Accounts be made up, which is generally once a Year, and then they are paid their Arrears.

Sub Divisions. The lesser Parts into which a Regiment is divided in marching, being half the greater Divisions.

Succour. To succour a Place, is to raise the Siege, driving the Enemy from before it.

Superficial Fourneau. *Vide Caïsson.*

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Surface in Fortification. That Part of the exterior Side, which is terminated by the Flank, prolonged or extended, and the Angle of the nearest Bastion. The Double of this Line, with the Curtin, is equal to the exterior Side.

Sutler. One that follows the

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Camp, and sells all Sorts of Provisions to the Soldiers. They pitch their Tents in the Rear of each Regiment, and about the General's Quarters. In all Garrisons there are also Sutlers, who serve the Soldiery.

Swallow's Tail. Vide *Queue d'Ironde.*

T.

Tail of the Trenches. The first Work the Besiegers make when they open the Trenches, as the Head of the Attack is carried on towards the Place. There is always Danger at the Tail of the Trenches, because it is exposed to the Batteries of the Place, and the Cannon, mounted on the Cavaliers, plays upon those that relieve and mount the Guard. A Guard of Horse is ever kept at the Tail of the Trenches, to be in a Readiness to come to the Relief of Workmen at the Head, in case of Sallies: And this Guard is relieved as often as the Trenches.

Talus. The Slope allow'd to every Rampart Work raised of Earth, that it may stand the faster, and is more or less, according as the Earth is looser or more binding. As for Instance, the Rampart is not built upright, because it is of Earth; but it goes sloping, being thicker at the Bottom or Foot, than at the Top, and this Slope is called the *Talus*.

Exterior, or Outward Talus. The Slope given to a Work on

the Side towards the Country, and ought to be as small as possible, that the Enemy may not find it easy to be mounted, either by Scale or otherwise. But if the Earth be not good, the *Talus* must be large, that it may keep it up the better. In such a Case it were good to support the Earth with a Wall, which the French call *Chemise*, when it is not thick, and otherwise *Revetement*, which signifies cloathing or fencing, to make the Earth last longer, and to save the making too large a *Talus*. This Wall ought to have a small *Talus* of a fifth or sixth Part of its Height, and for a Reinforcement it is generally supported in the Inside by Counter-forts, or a Sort of Buttresses.

Interior, or Inward Talus. The Slope of the Work next the Town, which is much larger than that of the Outside; and has at the Angles of the Gorge, and sometimes in the Middle of the Curtin, Ramps, or sloping Roads, to mount upon the Terre-plein of the Rampart. The

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Interior Talus of the Parapet ought to be very small, that the Men may with more Ease fire over it. See *Profile*.

Superior or Upper Talus of the Parapet. The Slope on the Top of the Parapet. This Slope allows the Soldiers to defend the Covert Way with small Shot, which they could not do were it level.

Tat-too. Sometimes call'd the Retreat, or Beat of Drum at Night for all Soldiers in Garrison to repair to their Quarters, and to their Tents in the Field: After which in Frontier Towns, and where the Inhabitants are suspected, they are not permitted to stir abroad, or, at least, not without a Light. See *Retreat*.

Te Deum. A holy Hymn sung in Thanksgiving for any Victory obtained, which is often abus'd, being sung by those that are beaten to conceal their Shame.

Temoins. A French Term for the Pieces of Earth left standing as Marks or Witnesses, in the Fosses of Places they are emptying, to the end they may know exactly how many cubical Fathoms or Feet of Earth have been carried away, thereby to pay the Workmen.

Tenaille of a Place, or Fortrefs. The Face of it. Vide *Face*.

Tenaille. An Outwork longer than broad, whose long Sides are parallel; and is either single or double. There are likewise *Tenailles* in the Foss.

Single Tenaille. A Work

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whose Front is advanc'd towards the Country, having two Faces forming a Re-entring or Re-trante Angle; its two long Sides terminate on the Counterscarp, opposite to the Angle of the Shoulder.

Double Tenaille. A Work whose Front having four Faces, forms two Re-entrings, and three Saliant Angles; its long Sides are likewise parallel, and terminate on the Counterscarp, opposite to the Angle of the Shoulder. Both the single and double *Tenailles* have this Fault, that they are not flanked or defended at the Re-entring Angle, because the Height of the Parapet hinders the Soldiers from discovering before that Angle. Therefore *Tenailles* are only made when there is not Time enough to make Hornworks. The Ramparts, Parapets, Fosses, Covert Way, and Glacis of *Tenailles*, are the same with other Outworks.

Tenaille in the Foss. A low Work raised before the Curtin in the middle of the Foss, and is of three different Sorts. The first is composed of a Curtin, two Flanks, and two Faces. The Rampart of the Curtin, including the Parapet and Talus, is but five Fathom thick, but the Rampart of the Flanks and Faces is seven. The second is composed only of two Faces, made on the Lines of Defence, whose Rampart and Faces are parallel. The third differs from the last, only in having its Rampart parallel to the Curtin of the Place.

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Place. All these Sorts are very good Defences for the Foss, and lie so low, that they cannot be hurt by the Besiegers Cannon, till it be on the Covert Way. See *Quai d'Yronde*.

Terre Plein of a Rampart. The Horizontal Superficies of the Rampart, between the Interior Talus and the Banquet. 'Tis on the *Terre plein* that the Defendants go and come: It is likewise the Passage of the Rounds.

To Tertiate a Piece. To examine whether it has the due Thickness of Metal in every Place, and whether it be true bored.

Toise. A Measure used by the French Engineers in all their Fortifications, and is a Fathom six Foot. A square *Toise* is 36 square Feet, and a cubical *Toise* is 216 cubical Feet.

Tompion. A Stopple of Wood or Cork, which is used in loading a Mortar; it is exactly fitted for the Mouth of the Chamber, and is drove hard in after the Powder, and the Bomb is placed above it: It serves, by confining the Powder, to make it burst out with the more Violence.

Tompion is likewise a Stopple of Wood for the Mouth of the Mortar or Gun, to keep out Rain.

Tong. The same as *Tenaille*.

Touch-hole. The Hole of any Piece to give Fire to it.

Town Major. Vide *Major*.

Train. Vide *Artillery*.

Transum. A Piece of Wood which goes across betwixt the

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Cheeks of a Gun Carriage, or of a Gin, to keep them fix'd together; each *Transum* in a Carriage is strengthened by a Bolt of Iron.

Trapeze. A Figure that has only two of its four Sides parallel.

Trapezoid, or *Tablet*. Has all its four Sides and Angles unequal, and no Sides parallel.

Traverse. A Trench with a Parapet, and sometimes two, one on the Right, and another on the Left. Sometimes this Trench is open over Head, and sometimes covered with Planks, loaded with Earth. This Word is often taken for a Gallery, and also signifies a Retrenchment, or Line fortify'd with Fascines, Barrels, or Bags of Earth, or Gabions. *Traverses* are very advantageous in stopping an Enemy's Way, and to prevent being enfiladed. They are likewise a good Defence in a dry Foss, in making the Parapet on the Side next the opposite Flank.

Traverse on a wet Foss, is made by throwing into the *Foss*, over against the Place where the Miner is to be put to the Foot of the Wall, abundance of Saucissons, Joysts, and other Pieces of Wood, with Fascines, Stones, Earth, and all other things which can help to fill up the *Foss*, and be capable of carrying a Gallery for such as use it.

Traverse, is likewise a Wall of Earth or Stone cross a Work which is commanded, to cover the Men.

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To traverse a Gun or Mortar, is to bring her about with Hand Spikes to the Right or Left, till she is pointed exactly at the Object.

Trench. In general it signifies any Ditch, or Cut, made in the Earth.

Trenches, Approaches, or Lines of Attack. Works carried on by the Besiegers, being usually cut into the Ground, with Parapets next the Place, for their Men to gain Ground, and draw near the Fortifications of the Place under Covert. They are carried on differently, according to the Nature of the Ground. For if all round the Town the Ground be rocky, the *Trenches* are raised above it with Fascines, or Faggots, Bags of Earth, Gabions, Woolpacks, Epaulments of Earth brought from far, and any thing that may cover the Men without flying, as Stones, and the like. But if the Earth is fit to dig, the *Trenches* are no other than a Ditch, or Way sunk down into the Earth, and edg'd with a Parapet next the Besieged: Its Depth is about six or seven Feet, and its Breadth seven or eight. Howsoever the *Trenches* be made, they must always be so contriv'd, that the Besieged may never enfilade them, that is, scour the Length of them with their Shot. For this Reason they are carried on by Coudees, Elbows, or Traverses, which are Lines returning back from the End of them, and running almost parallel with the Place. As the *Trenches* are never

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carried on but in the Night-time, therefore the Ground ought to be exactly viewed in the Day. On the Angles or Sides of the *Trench*, there ought to be Lodgments or Epaulments in form of Traverses, to hinder the Sallies of the Garrison, favour the Advancement of the *Trenches*, and to sustain the Workmen. These Lodgments are small *Trenches* fronting the Place besieged, and joining the *Trench* at one End. The Platforms for the Batteries are made behind the *Trenches*, the first at a good Distance, to be used only against Sallies of the Garrison. As the Approaches advance, the Batteries are brought nearer, to ruin the Defences of the Place, and dismount the Artillery of the Besieged. The Batteries for the Breaches are made, when the *Trenches* are advanced near the Covert Way. If there be two Attacks, there must be Lines of Communication, or *Boyaus*, between the two, with Places of Arms, at convenient Distances. The Parapet ought to be five Foot thick, and have Banquets for the Soldiers to mount upon.

Returns of a Trench. The Elbows and Turnings, which form the Lines of Approach, and are made as near as can be parallel to the Defences of the Place, to prevent their being enfiladed.

To open the Trenches, see *Open*.

To carry on the Trenches, to advance them towards the Place.

To mount the Trenches, is to mount Guard in the *Trenches*.

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To relieve the Trenches, is, to relieve the Guards of the *Trenches*. *To dismount the Trenches*, is to come off the Guard of the *Trenches*. *To cleanse or scour the Trenches*, is to make a vigorous Salley upon the Guard of the *Trenches*; forcing them to quit the Ground, breaking down the Parapet, filling up the *Trench*, and nailing their Cannon.

Counter Trenches. *Trenches* made against the Besiegers, which consequently have their Parapet turned against the Enemy's Approaches, and are enfiladed from several Parts of the Place, on purpose to render them useless to the Enemy, if they chance to be Masters of them; but they ought not to be enfiladed or commanded by any Height in the Enemy's *Trenches*.

Triangle, or *Trigon*. A Figure consisting of three Sides, and as many Angles.

Triangle Rectangular. Which has one right Angle.

Triangle Ambligone. Which has an obtuse Angle.

Triangle Oxigon. Which has a sharp or acute Angle.

Triangle Equilateral. Which has all three Sides of an equal Length.

Triangle Isoscele. Which has only two Sides equal.

Triangle Scalene. Which has all three Lines unequal.

Troop of Horse or Dragoons. A small Body of about 50 or 60, sometimes more, sometimes less; commanded by a Captain. Each Troop has, besides a Captain, a Lieutenant, Cornet, Quarter Master, and three Corporals,

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who are the lowest Officers in a Troop. A Regiment of Light Horse, in England, consists of six Troops, and sometimes nine.

Independent Troop. That which is not incorporated in any Regiment.

Troop. *To beat the Troop*, or *Assembly*. Is the second Beat of Drum when the Foot are to march; the General being the first, to give Notice of the March, and the Troop the next, for the Men to repair to their Colours.

Trooper. The vulgar Name by which every Horse Soldier is call'd. The French call them *Maitres*, or *Cavaliers*.

Trumpet. Signifies either the Martial Instrument used among the Horse, to give Notice what they are to do, or the Man that sounds it. We say, 'To sound to Horse, a March, a Charge, a Retreat, a Levee.' Every Troop of Horse has two Trumpets. The Sound of the Trumpet before a March, is to boot and saddle, at which the Troopers get themselves ready to mount. This is sounded when the Drums beat the General. When the Assembly is beat, the Trumpet sounds *To Horse*, and they all mount; the third is *To March*. They sound a Charge in Day of Battle, and the Retreat at Night.

Trunions of a Gun. The two Pieces of Metal sticking out of the Sides of a Piece, by which it swings in its Carriage. They are generally the Diameter of the Ball of the Piece in Length, and

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and their Diameter is the same with the Diameter of the Ball. The Axis of the *Trunions*, is equal with the lowermost Side of the Chace of the Gun.

Trunion Ring, is that Ornament or Jutting-out a little before the *Trunions*.

Turnpike. A Piece of Wood, or Spar, 10, 12, or 14 Feet long, 6 or 8 Inches, or even a Foot Diameter, cut in a Sex-angular Form, every Side of it bor'd full of Holes about an Inch Diameter, and 5 or 6 Inches from one another, but not answering on the Sides to one another; on

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the contrary, all differently profited. Through these Holes, Pickets, that is, short Pikes, are run, being about 5 or 6 Feet long, and an Inch Diameter, pointed with Iron, and fastened into the Holes with Nails or Wedges. Thus the Points stand out every Way; and these *Turnpikes* are of great Use to stop an Enemy, being placed on a Breach, or at the Entrance of a Camp, or in any Gap. They are likewise a good Defence against the Horse of an Army. *Turnpikes* are likewise call'd *Chevaux de Frise*.

V.

VAN, or *Vanguard*. The first Line of an Army drawn up in Battalia, which gives the first Charge upon the Enemy; the second Line is the Main Body, and the Third the Rear Guard, or Body of Reserve. The *Van* is the Front, or foremost Part of any Body, or Bodies of Men.

Vedette. A Centry on Horseback, or a Trooper upon a Centry Post. His Horse's Head is towards the Place from whence any Danger is feared, and his Carabine is advanced with the Butt End against his Right Thigh; when the Army lies encamped, there are *Vedettes* posted at all Avenues, and on all rising Grounds, to watch for its Security.

To View a Place in order to besiege it, which the *French* call

Reconnoître, is when the General, accompanied by the Engineer, rides round the Place, observing the Situation of it, with the Nature of the Country about it; thereby to judge of the most convenient Place for opening the Trenches, and carrying on the Approaches; to find out proper Places for encamping the Army, for the Lines of Circumvallation and Contravallation, and for the Park of Artillery.

To View, or *Reconnoître an Enemy*. To get as near their Camp as possible; to see the Nature of the Ground, and the Avenues to it; to find out the Strength and Weakness of their Encampment, where they may be best attacked, or whether it be proper to hazard bringing them to Action. Parties of Horse

Horse are generally sent out to view the Enemy's March, to know whither it tends; thereby to guess at their Designs, and to regulate the Motions of the Army accordingly.

To view or reconnoitre, is likewise when the Quarter Master General, with a strong Party of Horse, goes to view the Ways for the March of an Army, and to find the most convenient Place for an Encampment.

*Ulan*s. Horsemen. The Officers, at Home, are dress'd in Cloth, and the private Men in Sheep's Skins. They wear a Mantle made of Wool, an Inch thick, so that the Rain can never enter it: They fasten it about their Necks with a Leather Thong, or Piece of Silk, and so turn it which Way the Wind sits, or the Rain falls: Their Breeches are very large, and come down to their Anles: They wear a Bonnet and Buskins, the Heels of which are shod with small Nails: They had formerly White Cock's Wings at their Backs, which were to fright their Enemy's Horses; and, for the same Purpose, their Standards were adorned with Eagle's Wings. The Arms they use are a Bow and Arrows, and Sabre, which they manage with great Dexte-

rity. When they ride full Speed, they will raise themselves upon their Stirrups, and, like the old *Parthians*, discharge whole Showers of Arrows behind them upon their Pursuers. They are in general much afraid of Fire Arms: But those in the Service of the King of *Prussia* are armed with a Carabine and Pistols. They always carry a Knife and an Awl, for the making their Whips, which they call *Kantschou*, the Handle of which is composed of several little Twigs of brown Wood, to which they attribute 'this singular Virtue, that, by striking thrice on the Crupper, a Horse that cannot stale is immediately cured.

Voluntiers. Gentlemen, who, without having any certain Post, Pay, or Employment, in the Forces under Command, put themselves at their own Expence upon warlike Expeditions, and run into Dangers only to gain Honour and Employment.

Utsenfile. The Necessaries due to every Soldier, and to be furnish'd by his Host where he is quarter'd: They are, a Bed with Sheets, a Pot, a Glass, or Cup to drink out of, a Dish, a Place at the Fire, and a Candle. Sometimes the Inhabitants compound, and allow so much in Money to be eas'd of it.

WADD. A Stopper of Hay or Straw forced into a Gun upon the Powder, to keep it close in the Chamber. When it is home at the Powder, the Gunner gives it generally three Thumps with the Rammer Head.

Wad Hook, or Worm. A small Iron turn'd Serpentwise, like a Screw, and put upon the End of a long Staff, to draw out the Wad of a Gun when she is to be unloaded.

Waggon Master General. He who has the ordering and marching of the Baggage of an Army. On a Day of March, he meets the Baggage at the Place appointed in the Orders, and marshals it according to the Rank of the Brigade or Regiment each Waggon belongs to, and marches it according to the Rout given him; which is sometimes in one Column, sometimes in two; sometimes after the Artillery; and sometimes the Baggage of each Column follows their respective Column.

Warning Piece. The Gun which fires every Night about Sun-set, to give Notice to the Drums and Trumpets of the Army, to beat and sound the Retreat or *Tât-too*, which is likewise called *Setting the Watch*.

Waradins. See *Sclavonians*.

Warrant Officer. See *Officer*.

Way of the Rounds. See *Chemin des Rondes*, or *Fausse Braye*.

Well. A Depth the Miner sinks into the Ground, and thence carries on the Branches, or Galleries, to find out, and disappoint the Enemy's Mines, or to prepare his own.

To wheel. This is a Motion that brings a Battalion, or Squadron, to front on that Side where the Flank was, which is wheeling to the Right or Left, if an Enemy appear ready to attack the Flank, or if it be thought fit to fall upon the Enemy's Flank. In this Motion the Ranks and Files must take great Care not to bend, but every one to keep his due Distance; and there must be very able Sergeants at the Angles, to see the Files do not break, and fall into Confusion. If the Battalion wheels to the Right, the Left Wing moves first, describing the fourth Part of a Circle about the Leader on the Right, who is the Center of the Motion, and stirs not off his Ground. If the Wheeling be to the Left, the contrary is to be perform'd. *To wheel by single Ranks*, if it be to the Right, the Right Hand Man of each Rank turns on his Heel, while the Left Hand Men move round, and the whole are formed into one Rank, fronting as their Flank was before. To reduce them into Ranks again, the Left Hand Men turn on their Heels, while the Right Hand Men move round. Squadrons

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of Horse wheel after the same Manner.

Wicket. A small Door in a Gate of a fortified Place, at which a Man on Foot may get in, and which is sometimes opened when the Gate is ordered to be kept shut. The Height of it is about three Feet and a half, and the Breadth two.

Windage of a Gun. The Difference between the Diameter of the Bore, and the Diameter of the Ball: For since the Balls are rough, if they were not somewhat less than the Bore, they might jamm in the Piece: So that the *Windage* of a Demi Culverin is a Quarter of an Inch.

Windlace. A Roller of Wood square at each End, thro' which are either cross Holes for Hand Spikes, or Staves across to turn it round: By this means it draws a Cord, one End of which is fastened to some Weight which it raises up. They are used in Gins, and about *Dutch Mortars*, to help to elevate them.

Wing of an Army drawn up for Battle, or Wing of one of its Lines. The Horse on the Flanks, or at the End of each Line on the Right and Left.

Wing of a Battalion, or Squadron. The Right and Left Hand Files, that make up each Side or Flank. Formerly when a Battalion was drawn up, the Pikes were in the Center, and the Musqueteers on the *Wings*, which *Wings* are also call'd *Great Divisions*, or *whole Divisions* of the Battalion. In *Wheelings*,

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when they *Wheel* to the Right, the Left Wing of the Battalion moves first, whilst the Right Wing takes a short Compass, turning up the File Leader of the first file, as upon a Centre. The contrary is done if they wheel to the Left.

Winter Quarters. See *Quarters*.

Witnesses. See *Temoins*.

The Word. A Word that serves for a Token, and Mark of Distinction, given privately every Night in an Army by the General, and in Garrison by the Governor, or other Officer commanding in Chief, to prevent Surprise, and hinder an Enemy, or any treacherous Person, to pass backwards and forwards. When the Governor, Deputy Governor, or Town Major, goes the Rounds in a Garrison, the Officer commanding in every *Corps de Garde*, is to receive and give them the *Word*; but inferior Rounds are to give *Word* to the Guard. In an Army, the General gives the *Word* to the Lieutenant General, or Major General of the Day, who gives it to the Majors of Brigades, they to the Adjutants, who give it first to the Field Officers, and afterward to a Sergeant of each Company, who carry it to the Subalterns. In Garrison it is given by the Governor, after the Gates are shut, to the Town Major, who gives it to the Adjutants, and they to the Sergeants.

Words of Command, are the Terms used by Officers in exercising

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cising Battalions or Squadrons, or when they are upon Action.

Works. All the Fortifications about a Place, are called the

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Works of the Place; and more particularly all detached *Works*, are called the *Out-works*.

Y.

Younger Regiment, or Officer.

That Regiment is *youngest* which was last raised, and that Officer *youngest* whose Commission is of the latest Date, tho'

he be never so old a Man, or have served never so long in other Capacities. See more under the Word *Seniority*.

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